AGREED
Chairman of the
Educational and Methodological
Council of JSC «International Information
Technology University»

Mustafina A.
«12» December 2025 Protocol of the EMC № 3

APPROVED
Chairman of the Board-Rector of JSC
«International Information
Technology University»

Issakhov A.
«28» February 2025 Protocol of the AC № 10

EDUCATIONAL PROGRAM

7M06104 «IT Project management»

Code and classification of the field of education: 7M06 – Information and

Communication Technologies

Code and classification of training area: 7M061 - Information and Communication Technologies

Group of educational programs: M094 – Information Technologies

ISCED level: 7

NQR level: 7

ORC level: 7

Academic degree awarded: Master of Technical Sciences in the Educational Program 7M06104 – IT Project Management

Duration of study: 2 years

Number of credits: 120

AGREED
"KADEEN" LLP

Director Daniyarov Zh.

«____» _____ 2025

AGREED
"Zerone Technology" LLP

Director Rashidinov D.

«____» _____ 2025

The code and name of the educational program: 7M06104 «IT Project management»

№	Educational program developers (Position, scientific degree, academic degree, Full name)	Signature
1	Associate Professor of the Department of Information Systems, Ph.D., Associate Professor Sembina Gulbakyt	
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List of abbreviations and symbols

ALE	Additional Learning Activities
ANPC	Atlas of New Professions and Competencies
BC	Basic Competency
BM	Basic Module
CC	Compulsory Component
EC	Elective Component
EP	Educational Program
EQF	European Qualifications Framework
ETF	European Training Foundation
FA	Final Attestation
GE	General Education Cycle
GEC	General Education Cycle
GEM	General Education Module
GHM	General Humanities Module
GPM	General Professional Module
HE	Higher Education
ISCED	International Standard Classification of Education
IT	Information Technologies
KSA	Knowledge, Skills, Abilities
LO	Learning Outcome
MSRW	Master's student research work
NQF	National Qualifications Framework
NQS	National Qualifications System
OHPE	Organization Of Higher Postgraduate Education
PC	Professional Competency
PC	Professional Disciplines Cycle
PGE	Postgraduate Education
PM	Professional Module
PS	Professional Standard
QMS	Quality Management System
RP	Research Practice
SESE	State Educational Standards of Education
SFQ	Sectoral Framework of Qualifications
SW	Software
TP	Teaching Practice
UC	University Component

1. Description of the educational program

This educational program was developed based on the professional standards (PS) of the National Chamber of Entrepreneurs "Atameken", the National Qualifications System (NQS), and the Sectoral Framework of Qualifications (SFQ) in the field of information technology, drawing on research and trends presented in the Atlas of New Professions and Competencies (ANPC) of Kazakhstan in the area of information technology.

In accordance with the updated qualifications policy, the program development also incorporated the provisions of career standards from the Enbek platform, developed within the framework of the National Qualifications System. These standards support the construction of a coherent career trajectory for IT project management professionals—from junior manager to head of digital transformation.

Currently, many organizations have established dedicated positions for IT project managers (and in IT-oriented companies, even entire specialized departments). As a result, there is an urgent need for training specialists such as project leaders and managers in the field of information technology. The profession of project manager is officially recognized in many countries around the world; corresponding training programs and professional associations exist, and job vacancies are regularly published.

The profession of IT project manager is an integral part of the effective organization of the development and implementation of information systems.

The educational program "7M06104 IT Project Management" includes the acquisition of the following competencies:

- the ability to select the methodology and tools for implementing the process approach at the enterprise; implement independent solutions in the field of business analytics using SharePoint; create an effective system of key KPI indicators; design SQL Server business analytics infrastructures; work with Integration Services in the data warehouse; implement BI using self-service tools; present data using Reporting Services; determine forecasting trends using data mining methods.

- The ability to understand the types of IT projects, the life cycle of an IT project and its phases, the organizational structure of an IT project, the main standards in the field of project management, Scrum and Agile methodologies; groups of IT project management processes, principles of IT project cost management; methods of IT project quality management, basic approaches to forming an IT project team, methods of assessing IT project risks, the structure of the logistics system of an IT project; optimize the organizational structure of an IT project; estimate the cost of an IT project; manage IT project resources; identify project risks; manage project changes; manage work on an IT project; form and develop project teams; manage IT project communications.

- Ability to analyze the goals and interests of project stakeholders; define the goals, subject area and structure of the project; calculate the project implementation schedule; form the main sections of the consolidated project plan; - analyze project risks; select software for solving the main project management tasks.

- Ability to implement and effectively manage software management activities; ensure that changes are carried out while maintaining the integrity of the software and with minimal negative impact on the IT infrastructure and software users; conduct testing of executable code (programs) (failures and disruptions in the software, as well as lack of software functionality) that arise at the stage of implementation and maintenance of IT systems; prepare release notes.

- Ability to understand the theory and methodology of strategic planning; make strategic decisions, critical thinking, based on modern mathematical methods and scientific approaches to management in conditions of incomplete information and constant changes in the external environment; develop communication skills that allow you to effectively interact with stakeholders, develop a strategy and find alternative options in conditions of uncertainty; improve management experience based on classical models and tools of strategic management in relation to various conditions of the organization's activities.

- Ability to understand the key principles of working with various business analytics methodologies, such as Agile and Scrum; describe the characteristics of business analysis in the process of Agile projects; apply the Agile methodology to increase customer value.

2. Purpose and objectives of the educational program

The purpose of the EP is to provide professional and research training of highly qualified specialists in the field of IT project management with broad competencies in the development, implementation and management of software products that increase the efficiency of companies and ensure their integration into the digital space.

Objectives of the EP:

1. To provide practice-oriented training of graduates in the field of development, implementation and application of project management technology.

2. To prepare graduates for production and management activities related to the management process, including: product development management, creation of an effective management system; analysis of the effectiveness of management decisions, implementation of controlling across the entire spectrum of production activities.

3. To create conditions for continuous professional self-improvement, the development of socio-personal competencies of graduates (broad cultural outlook, active citizenship, dedication, organization, hard work, sociability, ability to argue and make organizational and managerial decisions, proficiency in modern information technologies, fluency in several languages, striving for self-development and commitment to ethical values and a healthy lifestyle life, the ability to work in a team, responsibility for the final result of their professional activities, civic responsibility, tolerance), social mobility and competitiveness in the labor market. The purpose of the OP is to provide research training for masters in the field of IT project management.

3. Passport of the educational program

№	Name	Description
1.	Code and classification of the field of education	7M06 Information and Communication technologies
2.	Code and classification of the training area	7M061 Information and Communication technologies
3.	Group of educational programs	M094 Information technologies
4.	Name of the educational program	7M06104 IT Project Management
5.	The purpose of the educational program	The purpose of the EP is to provide professional and research training of highly qualified specialists in the field of IT project management with broad competencies in the development, implementation and management of software products that increase the efficiency of companies and ensure their integration into the digital space.
6.	Type of Educational Program	New
7.	National Qualifications Framework Level	7
8.	Sectoral Qualifications Framework Level	7
9.	Distinctive features of the program	No
10.	Partner University	No
11.	Awarded academic degree	Master of Engineering Sciences in the educational program «7M06104 IT Project Management»
12.	Duration of study	2 years
13.	Volume of loans	120
14.	Language of education	English
15.	Atlas of new professions	MVP manager, Product manager, R&D manager
16.	Regional standard	No
17.	Existence of the annex to the license for the direction of personnel training	Yes

18.	The license number on the direction of training	KZ81LAM00001263
19.	Availability of program accreditation	ASIIN
20.	Formed learning outcomes	The learning outcomes reflect the context and content of the programme, correspond to the level of the Master's degree, are interconnected, achievable and understandable. The programme develops knowledge and skills in IT project management, risk management, business and systems analysis, scientific research, strategic and innovation management, as well as teaching activities. All outcomes are integrated into the academic workload and are assessed using appropriate methods and criteria.

4. Professional standards (PS), profession cards, labor functions

№	PS name	Profession card	Labor functions
1	Business analysts and IT project management	Business Analyst in IT	1. Collection and documentation of requirements for the IS 2. Development of proposals for process optimization and automation 3. Definition of the organizational structure of the project 4. Management of communications with stakeholders 5. Formalization and systematization of the collected information 6. Analysis of requirements and formation of technical specifications 7. Development of the concept of IS development
2	Software testing	ICT Researcher	Analyzing problems to develop solutions using computer hardware and software
3	PS: for teachers (teaching staff) of higher and (or) postgraduate education institutions	Teacher, assistant in the field of education, OHPE	1. Conducting scientific research 2.Implementation of scientific and methodological work

5. List of Program Competencies

BC1. The ability to master the culture of thinking, generalization, analysis, perception of information, setting goals and choosing ways to achieve them

BC2. The ability to construct oral and written speech in a logical, reasoned and clear manner, to formulate and reasonably defend one's own position, to analyze the consequences of scientific and industrial activities

BC3. The ability to creatively interact with colleagues in a research team, to build interpersonal interactions, respecting comrades and showing tolerance for other points of view

BC4. The ability to make organizational and managerial decisions and assess their consequences

BC5. Fluency in a foreign language as a means of professional communication

BC6. The ability to self-develop, improve skills, readiness to eliminate gaps in knowledge and carry out independent learning in the context of continuous education, master new issues, language, methodology and scientific knowledge in the chosen subject area

BC7. The ability to critically evaluate one's strengths and weaknesses, to outline paths and choose means to develop strengths and eliminate weaknesses.

PC1. The ability to identify the essence of problems arising in the course of professional activity and to use the appropriate physical and mathematical apparatus to solve them.

PC2. Ability to identify promising areas of scientific, technical or innovative activity, select current problems in the subject area and propose methods for solving research problems.

PC3. Ability to deeply understand project management methodologies (Waterfall, Agile, Scrum and others), their practical use for managing deadlines, budgets and resources.

PC4. Have skills in strategic planning, budget assessment and resource allocation.

PC5. Ability to identify risks, develop plans to manage them, and ensure the quality of project execution.

PC6. Ability to collect, analyze and interpret data to support management decisions within an IT project, and to be proficient in modern IT tools.

PC7. Knowledge of national and international IT standards, including data protection and privacy requirements.

PC8. Ability to develop and implement innovative solutions and manage change in organizations.

PC9. Have skills in leading interdisciplinary teams, managing conflicts and motivating employees.

PC10. Ability to effectively allocate resources and manage communications within an IT project.

PC11. Know the methodologies and technologies for conducting scientific research in the field of IT management.

6. List of learning outcomes of the EP

LO1. Know the basics of project, program and portfolio management; own tools and methods of project management; be able to maintain project documentation; be able to conduct market research.

LO2. Apply projects risk management techniques.

LO3. Manage the quality, timing of projects based on the adoption of optimization decisions on the project of financial management of projects.

LO4. Possess the skills of managing and developing the project team; be able to manage stakeholders; be able to use information technologies for project management; have a flexible approach to project management.

LO5. Document the process and result of scientific research in accordance with the standards and regulations for the conduct of scientific research, if necessary, using English as a means of communication in professional and scientific activities.

LO6. Apply methods of managing stakeholders and counterparties of the project.

LO7. Apply methods of business analysis, audit and system analysis of information systems.

LO8. To be able to assess the factors of the internal and external environment of companies and projects, to master the skills of financial analysis of companies and projects, to draw up strategies for the development of a company through projects.

LO9. Conduct an analysis of the digital infrastructure of the organization, apply methods for optimizing business processes and assess the effectiveness of information resources.

LO10. Know the basics of project integration and be able to manage project content; be able to draw up a project plan; possess the skills of project investment analysis; be able to manage the cost and procurement of the project, be able to manage the quality and risks of the project.

LO11. Use information technologies for innovation management and effective methods for implementing start-ups and IT projects.

LO12. Own the ability to conduct marketing research in the market of high-tech goods; have

the ability to model and determine the stages of the life cycle of innovation according to econom-ic and financial criteria.

LO13. Develop the field of information and communication technologies by conducting theoretical and experimental research, through the integration of knowledge from existing areas of ICT, new or interdisciplinary areas, and taking into account philosophical, historical, linguistic, psychological factors.

LO14. Organize and manage communications, team and project staff development

LO15. Demonstrate the ability to apply modern psychological and pedagogical strategies in managing the educational environment of the university, designing curricula, implementing inclusive and digital approaches, as well as in professional interaction and development of academic teams based on the principles of leadership, coaching and scientific analysis.

7. Matrix of correlation of learning outcomes of the educational program with the formed competencies (V)

	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO 10	LO 11	LO 12	LO 13	LO 14	LO 15
BC1	V						V		V		V	V	V		
BC2			V												
BC3				V									V	V	V
BC4	V			V		V		V		V					
BC5					V										
BC6		V			V		V		V		V				
BC7															V
PC1													V		
PC2													V		
PC3	V		V												
PC4	V				V					V					
PC5		V								V					
PC6	V		V				V		V	V		V	V		
PC7										V					
PC8											V	V			
PC9	V													V	
PC 10	V			V		V				V	V			V	
PC 11					V								V		V

8. Relationship between LO and labor functions

№	LO	Labor functions
1.	LO1. Know the basics of project, program and portfolio management; own tools and methods of project management; be able to maintain project documentation; be able to conduct market research.	Collection and documentation of requirements for the IS
2.	LO2. Apply projects risk management techniques.	IT project quality management
3.	LO3. Manage the quality, timing of projects based on the adoption of optimization decisions on the project of financial management of projects.	1. IT project quality management 2. Development of proposals for process optimization and automation
4.	LO4. Possess the skills of managing and developing the project team; be able to manage stakeholders; be able to use information	1. Defining the organizational structure of the project

	technologies for project management; have a flexible approach to project management.	2. Managing communications with stakeholders
5.	LO5. Document the process and result of scientific research in accordance with the standards and regulations for the conduct of scientific research, if necessary, using English as a means of communication in professional and scientific activities.	Conducting scientific research
6.	LO6. Apply methods of managing stakeholders and counterparties of the project.	Stakeholder communication management
7.	LO7. Apply methods of business analysis, audit and system analysis of information systems.	1. Formalization and systematization of collected information 2. Analysis of requirements and formation of technical specifications 3. Analysis of problems for developing solutions using computer hardware and software
8.	LO8. To be able to assess the factors of the internal and external environment of companies and projects, to master the skills of financial analysis of companies and projects, to draw up strategies for the development of a company through projects.	Development of proposals for process optimization and automation
9.	LO9. Conduct an analysis of the digital infrastructure of the organization, apply methods for optimizing business processes and assess the effectiveness of information resources.	1. Development of the concept of IS development 2. Development of proposals for process optimization and automation
10.	LO10. Know the basics of project integration and be able to manage project content; be able to draw up a project plan; possess the skills of project investment analysis; be able to manage the cost and procurement of the project, be able to manage the quality and risks of the project.	1. Definition of the organizational structure of the project 2. Quality management of the IT project
11.	LO11. Use information technologies for innovation management and effective methods for implementing start-ups and IT projects.	Development of the concept of development of the IS
12.	LO12. Own the ability to conduct marketing research in the market of high-tech goods; have the ability to model and determine the stages of the life cycle of innovation according to econom-ic and financial criteria.	Development of proposals for process optimization and automation
13.	LO13. Develop the field of information and communication technologies by conducting theoretical and experimental research, through the integration of knowledge from existing areas of ICT, new or interdisciplinary areas, and taking into account philosophical, historical, linguistic, psychological factors.	Conducting scientific research
14.	LO14. Organize and manage communications, team and project staff development	1. Defining the organizational structure of the project 2. Managing communications with stakeholders

15.	LO15. Demonstrate the ability to apply modern psychological and pedagogical strategies in managing the educational environment of the university, designing curricula, implementing inclusive and digital approaches, as well as in professional interaction and development of academic teams based on the principles of leadership, coaching and scientific analysis	Implementation of scientific and methodological work

9. Table of the relationship between competencies, learning outcomes, assessment methods and criteria

Competencies of a graduate of the EP	Competencies expressed in expected learning outcomes	Evaluation criteria	Name of the evaluation method
Basic competencies			
BC1. The ability to master the culture of thinking, generalization, analysis, perception of information, setting goals and choosing ways to achieve them	LO1 LO7 LO9 LO11 LO12 LO13	1. Justifies the choice of methodology and prepares project documentation. 2. Apply business analysis methods to formalize requirements for information systems. 3. Assesses digital infrastructure and proposes solutions for optimizing business processes. 4. Develops an IT startup launch plan and models the innovation life cycle. 5. Forms a research project taking into account an interdisciplinary approach.	Exam, project, practical work, case analysis, presentation
BC2. The ability to construct oral and written speech in a logical, reasoned and clear manner, to formulate and reasonably defend one's own position, to analyze the consequences of scientific and industrial activities	LO3	1. Manages the quality and timing of the project using optimization approaches.	Practice, test
BC3. The ability to creatively interact with colleagues in a research team, to build interpersonal interactions, respecting comrades and showing tolerance for other points of view	LO4 LO13 LO14 LO15	1. Organizes team work and interacts with stakeholders. 2. Forms a research proposal with an interdisciplinary approach. 3. Organizes teamwork and manages communications in the project. 4. Apply modern approaches in academic management and program development.	Case analysis, presentation, group work, methodological development, report
BC4. The ability to make organizational and managerial decisions and assess their consequences	LO1 LO4 LO6 LO8 LO10	1. Justifies the choice of methodology and prepares project documentation. 2. Organizes the team's work and builds interaction with stakeholders and contractors. 3. Conducts financial analysis and forms a development strategy through project activities. 4. Develops and implements a project plan, including content, cost and risks.	Exam, project work, presentation, group work, case analysis, report, test.
BC5. Fluency in a foreign language as a means of professional communication	LO5	Presents the results of scientific research in accordance with standards.	Scientific article, research report

BC6. The ability to self-develop, improve skills, readiness to eliminate gaps in knowledge and carry out independent learning in the context of continuous education, master new issues, language, methodology and scientific knowledge in the chosen subject area	LO2 LO5 LO7 LO9 LO11	1. Assesses project risks and proposes measures to reduce them. 2. Performs business analysis and forms requirements for the information system. 3. Assesses the digital infrastructure and proposes measures to optimize business processes. 4. Develops an IT startup implementation plan with stages and resources	Testing, situational tasks, project, case analysis, startup project, presentation
BC7. The ability to critically evaluate one's strengths and weaknesses, to outline paths and choose means to develop strengths and eliminate weaknesses.	LO15	Applies modern approaches to academic management and program development.	Methodological development, report
Professional Competency			
PC1. The ability to identify the essence of problems arising in the course of professional activity and to use the appropriate physical and mathematical apparatus to solve them.	LO13	Formulates a research proposal with an interdisciplinary approach.	Research project, presentation
PC2. Ability to identify promising areas of scientific, technical or innovative activity, select current problems in the subject area and propose methods for solving research problems.	LO13	Formulates a research proposal with an interdisciplinary approach.	Research project, presentation
PC3. Ability to deeply understand project management methodologies (Waterfall, Agile, Scrum and others), their practical use for managing deadlines, budgets and resources.	LO1 LO3	1. Able to justify the choice of project management methodology and prepare project documentation. 2. Manages the quality and timing of the project using optimization approaches.	Exam, project work, case defense
PC4. Have skills in strategic planning, budget assessment and resource allocation.	LO1 LO5 LO10	1. Able to justify the choice of project management methodology and prepare project documentation. 2. Prepares the results of scientific research in accordance with standards. 3. Develops a project plan and manages its content, cost and risks.	Exam, project work, scientific article, report, project defense
PC5. Ability to identify risks, develop plans to manage them, and ensure the quality of project execution.	LO2 LO10	1. Assesses project risks and proposes measures to reduce them. 2. Develops a project plan and manages its scope, cost and risks.	Test, situational tasks, project defense
PC6. Ability to collect, analyze and interpret data to support management decisions within an IT project, and to be proficient in modern IT tools.	LO1 LO3 LO7 LO9 LO10 LO12 LO13	1. Can justify the choice of project management methodology and prepare project documentation. 2. Manages the quality and timing of the project using optimization approaches. 3. Performs business analysis and forms requirements for the information system. 4. Assesses the digital infrastructure and proposes measures to optimize business processes. 5. Forms a research proposal with an interdisciplinary approach.	Exam, project work, case analysis, case defense, practical work, project, presentation.
PC7. Knowledge of national and international IT standards, including data protection and privacy requirements.	LO10	Develops a project plan and manages its scope, cost and risks.	Test, project defense

PC8. Ability to develop and implement innovative solutions and manage change in organizations.	LO11	1. Develops an IT startup implementation plan with stages and resources. 2. Conducts marketing analysis and models the innovation life cycle.	Startup project, presentation, marketing research, essay
	LO12		
PC9. Have skills in leading interdisciplinary teams, managing conflicts and motivating employees.	LO1	Able to justify the choice of project management methodology and prepare project documentation.	Exam, project work
	LO14		
PC10. Ability to effectively allocate resources and manage communications within an IT project.	LO1	1. Organizes team work and interacts with stakeholders. 2. Uses methods of interaction with contractors and interested parties. 3. Develops a project plan and manages its content, cost and risks. 4. Organizes teamwork and manages communications in the project.	Presentation, group work, practical assignment, case analysis, test, project defense
	LO4		
	LO6		
	LO10		
	LO11		
	LO14		
PC11. Know the methodologies and technologies for conducting scientific research in the field of IT management.	LO5	1. Presents research results in accordance with standards. 2. Develops a research proposal with an interdisciplinary approach. 3. Apply modern approaches to academic management and program development.	Scientific article, research report, methodological development, report
	LO13		
	LO15		

10. Information about the modules of the educational program

Module code and module name	Volume (labor intensity) of the module	Learning outcomes	Criteria for assessing learning outcomes	Disciplines that form the module, code and name
Basic Modules				
BM7100 Humanitarian and pedagogical	20 credits	LO5. Document the process and result of scientific research in accordance with the standards and regulations for the conduct of scientific research, if necessary, using English as a means of communication in professional and scientific activities. LO13. Develop the field of information and communication technologies by conducting theoretical and experimental research, through the integration of knowledge from existing areas of ICT, new or interdisciplinary areas, and taking into account philosophical, historical, linguistic, psychological factors. LO15. Demonstrate the ability to apply modern psychological and pedagogical strategies in managing the educational environment of the university, designing curricula, implementing inclusive and digital approaches, as well as in professional interaction and development of academic teams based on the principles of leadership, coaching and scientific analysis.	1. Presents research findings in accordance with regulatory requirements, including the ability to use English. 2. Justifies and formalizes theoretical or experimental research with an interdisciplinary approach. 3. Apply modern pedagogical strategies in program design and academic managementсредой.	LAN7001A Foreign language (professional) SPS7007 Higher education: psychological and pedagogical development strategies SPS 7001 History and philosophy of science PP7100Teaching practice
BM7101 Innovation and financial management	15 credits	LO3. Manage the quality, timing of projects based on the adoption of optimization decisions on the project of financial management of projects. LO8. To be able to assess the factors of the internal and external environment of companies and projects, to master the skills of financial analysis of companies and projects, to draw up strategies for the development of a company through projects. LO10. Know the basics of project integration and be able to manage project content; be able to draw up a project plan; possess the skills of project investment analysis; be able to manage the cost and	1. Able to develop and analyze project plans taking into account deadlines, content, cost, quality and risks. 2. Applies methods of financial analysis and strategic planning to evaluate and develop projects. 3. Uses modern IT tools and methods of innovation management to implement startups and analyze the life cycle of products.	PM7707 Innovation management PM7702 Start-ups and innovation management ECO7701 Economics for managers MRK7701 Marketing management FIN7701 Advanced Financial Management

		procurement of the project, be able to manage the quality and risks of the project. LO11. Use information technologies for innovation management and effective methods for implementing start-ups and IT projects. LO12. Own the ability to conduct marketing research in the market of high-tech goods; have the ability to model and determine the stages of the life cycle of innovation according to econom-ic and financial criteria.		PM7701 Financial project management
PROFESSIONAL MODULES				
PM7100 Project and quality management	13 credits	LO1. Know the basics of project, program and portfolio management; own tools and methods of project management; be able to maintain project documentation; be able to conduct market research. LO2. Apply projects risk management techniques. LO3. Manage the quality, timing of projects based on the adoption of optimization decisions on the project of financial management of projects. LO4. Possess the skills of managing and developing the project team; be able to manage stakeholders; be able to use information technologies for project management; have a flexible approach to project management. LO6. Apply methods of managing stakeholders and counterparties of the project. LO10. Know the basics of project integration and be able to manage project content; be able to draw up a project plan; possess the skills of project investment analysis; be able to manage the cost and procurement of the project, be able to manage the quality and risks of the project. LO11. Use information technologies for innovation management and effective methods for implementing start-ups and IT projects. PO14 - Организовывать и управлять коммуникациями, командой и развитием персонала проекта.	1. the student's ability to develop a project plan, including the content, timing, cost, quality and risks of the project. 2. the ability to apply risk management methods and analyze the investment attractiveness of the project. 3. the ability to organize teamwork, build communications and effectively interact with stakeholders. 4. the use of digital and flexible approaches to managing projects, startups and innovations. 5. assesses the skill of conducting marketing research and applying the results in project activities.	MGT7701 Theory and practice of project management PM7103 Project quality and risk management PM7705 Project stakeholders and integration management MGT7705 Effective project team management
PM7101 Modeling and intelligent technologies	14 credits	LO7. Apply methods of business analysis, audit and system analysis of information systems. LO9. Conduct an analysis of the digital infrastructure of the organization, apply methods for optimizing business processes and assess the effectiveness of information resources.	1. ability to apply business analysis, systems analysis and audit methods to assess and improve IS and digital infrastructure.	SFT7110 Pattern recognition methods SFT7109 Mathematical programming

		LO11. Use information technologies for innovation management and effective methods for implementing start-ups and IT projects.	2. ability to organize teamwork, build effective communications and develop personnel within the framework of project activities.	PM7102 Intelligent methods of IP and project management
PM7102 Scientific research	13 credits	LO5. Document the process and result of scientific research in accordance with the standards and regulations for the conduct of scientific research, if necessary, using English as a means of communication in professional and scientific activities.	Application of scientific methods, planning and implementation of research, presentation and protection of results	RM7101 Scientific research methods PP7101Research practice
PM7103 Analytics and management	13 credits	LO7. Apply methods of business analysis, audit and system analysis of information systems. LO9. Conduct an analysis of the digital infrastructure of the organization, apply methods for optimizing business processes and assess the effectiveness of information resources.	1. Applies business and systems analysis methods to identify problems and formalize requirements for information systems. 2. Analyzes digital infrastructure and proposes solutions to optimize business processes and improve efficiency of IT resources.	SFT7134 Business process management SFT7133 Analysis and design of information systems architecture PM7113Modern data analysis tools PM7107 Database management methods and business analytics

11. Information about the disciplines of the educational program

№	Code and Name of the discipline	Brief description of the discipline (30-50 words)	Labor intensity of discipline in loans	Formed learning outcomes (codes)	Prerequisites	Postrequesites
		Cycle of basic disciplines University component				
1.	SPS7007 Higher education: psychological and pedagogical development strategies	The discipline focuses on studying psychological and pedagogical strategies for the development of higher education, as well as forming competencies in designing and organizing the educational process. Master's students will master modern psychological and pedagogical approaches to teaching, methods for diagnosing and assessing students, as well as digital and inclusive education technologies. Special attention is given to the development of pedagogical, research, and communication skills, as well as the prevention of professional burnout among educators. Upon completion of the course, students will be able to develop and implement effective educational strategies in universities.	4	LO15	-	PP7100 Teaching practice
2.	LAN7001A Foreign language (professional)	Students will become familiar with the processes of activity and the sequence of procedures that are central to the study: in particular, how to determine the scope and topic of research, how to conduct research, how to work with various databases and data sources. During the course, undergraduates will work on one project.	5	LO5	-	-
3.	SPS 7001 History and philosophy of science	The purpose of the discipline is to form the skills of working with scientific literature; logical, systemic and critical thinking skills. The discipline will study: the main stages of the development of science; history and philosophy of science to form a conscious attitude to the environment and history, the basic principles of research activities.	5	LO13	-	RM7101 Scientific research methods
4.	PP7100 Teaching practice	Pedagogical practice is aimed at consolidating and deepening knowledge of the methodology of teaching specialized disciplines. The fundamentals of reforms in education and science, regulatory and legal acts, as well as the principles of making pedagogical and managerial decisions are studied.	4	LO15		SPS7007 Higher education: psychological and pedagogical development strategies
		Cycle of basic disciplines Elective component				
5.	MRK7701 Marketing management	The purpose of the discipline is to form a comprehensive understanding of the company's management on the principles of marketing, reflecting the relationship of strategic and tactical marketing decisions and assessing the impact of these decisions on business performance. The course studies the theoretical foundations and categorical and conceptual apparatus of marketing management, as well as mastering practical skills in applying the elements and principles of	5	LO12		PM7701 Financial project management

		marketing management in the activities of firms and companies.				
6.	ECO7701 Economics for managers	The purpose of the discipline is to form a clear relationship between the conclusions of economic theory and real market practice. This course covers the main sections of modern economic theory necessary for a manager. Methods for solving economic problems in market conditions are considered.	5	LO8 LO12		PM7701 Financial project management
7.	PM7702 Start-ups and innovation management	Methods and tools for analyzing and evaluating the effectiveness of various types of innovations and methods for their implementation, based on investment analysis; Methods of financial assessments for comparing the costs of new technical solutions with their effectiveness; Methods for building a strategy for managing innovation and startups, taking into account the audit of the company's digital infrastructure in order to assess opportunities	5	LO11		PM7701 Financial project management
8.	PM7707 Innovation management	This course focuses on innovation, what it is (or not), what it looks like ("search" and "choice") and how it can be managed ("embedded" and "captured"). Innovation is not limited to creativity and new technical ideas, but also takes organizational aspects into account. The course aims to provide an opportunity to learn to use some of the tools and news ways of thinking that are better suited to solving the complex problems and opportunities inherent in modern organizations.	5	LO11		PM7701 Financial project management
9.	PM7701 Financial project management	This course explores the basic financial concepts in business and project, financial report data and how these reports affect each other, the use of budgets and estimates for planning and cost control, project success indicators, earned value analysis, and forecasting. The course also helps you gain the necessary project and financial management skills to confidently motivate, communicate, make real-time decisions, and achieve business results that support the strategic goals of your team or organization.	5	PO3 PO10	Economics for managers, Marketing management	PM7103 Project quality and risk management
10.	FIN7701 Advanced Financial Management	This course covers a wide range of financial issues, including working with financial statements, assessing future cash flows, evaluating bonds and stocks, assessing risk and profit, evaluating capital budgeting decisions. The course is intended for undergraduates intending to work in various industries who will face difficulties in making financial decisions.	5	LO3, LO10	Economics for managers, Marketing management	PM7103 Project quality and risk management
		Professional disciplines cycle University component				
11.	MGT7701 Theory and practice of project management	The main objective of this course is to study modern methodologies, principles, and tools required for defining and managing projects in complex environments, understand of the role of projects in organizational change and innovation, thorough understanding of the phases and activities of the project life cycle, thorough understanding of the concepts of stakeholders, project outputs vs. project outcomes, business case, work breakdown structure, planning & organising, project governance, risks, scope creep and	5	LO1, LO10	-	PM7103 Project quality and risk management

		changes.				
12.	SFT7110 Pattern recognition methods	We study the methods and technologies of decision support systems by pattern recognition in various systems, methods of their application for information processing and system recognition. The concepts of modeling and simulation in the decision-making process using modern IT technologies are investigated.	5	LO7	-	PM7107 Database management methods and business analytics
13	SFT7109 Mathematical programming	Linear and nonlinear programming: simplex method, modified simplex method, general transport problem, production and storage planning problems, integer programming problems and gradient methods. Optimization of linear differential systems based on the dynamic programming method and the Pontryagin maximum principle.	5	LO9	-	The research work of a student
13.	RM7101 Scientific research methods	Methods of analysis and processing of static data; information technologies used in scientific research, software products related to the professional sphere; requirements for the design of scientific and technical documentation are considered.	5	LO5	SPS 7001 History and philosophy of science	The research work of a student
14.	SFT7134 Business process management	This course explores the basic principles, standards, technologies, and methodologies of business process modeling; methods of describing business processes are considered. The course consists of theoretical and practical parts. The practical part provides for the execution of tasks of analysis and modeling of business processes, Students also carry out independent work on certain topics.	5	LO9	-	SFT7133 Analysis and design of information systems architecture
15.	PM7102 Intelligent methods of IP and project management	The study of the discipline is aimed at preparing undergraduates to solve practical data processing problems using modern intelligent problem solving methods, including using the neural network method used for data processing, forecasting and clustering. Neural networks allow solving various non-formalized problems of data processing, forecasting and clustering of unstructured data without preliminary formulation of hypotheses.	4	LO11	-	The research work of a student
16.	PM7103 Project quality and risk management	Undergraduates in the process of studying the course will master the methods and tools for identifying, identifying, analyzing, evaluating and managing various threats, risks, negative scenarios for processes or projects implemented in the company. At the same time, methods of statistical data analysis will be mastered. As a result, undergraduates will learn how to build risk management strategies, knowing how to assess the costs of preventing negative scenarios. Also, in the process of studying the course, the criteria, principles and methods of project quality management will be studied.	4	LO2, LO3, LO10	MGT7701Theory and practice of project management, PM7102 Intelligent methods of IP and project management	
17.	SFT7133 Analysis and design	The architecture of information systems is being studied. Variants of information systems architectures. Design of information systems. Statement of	4	LO9	-	SFT7134 Business process

	of information systems architecture	requirements for IS architecture. Development of technical specifications for the design of information systems. Methodology for designing the architecture of information systems.				managemen t
18.	PP7101 Research practice	The course studies methods of analysis and processing of static data; information technologies used in scientific research, software products related to the professional sphere; requirements for the design of scientific and technical documentation.	8	LO5	RM7101 Scientific research methods	The research work of a student
		Professional disciplines cycle Component of choice				
19.	PM7705 Project stakeholder s and integration managemen t	Project stakeholders, as a rule, make efforts to a greater or lesser extent to favor the completion of the project, although they can sometimes negatively affect the project if they believe that its further development begins to ignore or infringe on their interests. As a result, the theory and practice of project management devote considerable attention to the classification of stakeholders, the analysis of their interests and, ultimately, the management of their behavior.	4	LO6	MGT770 1Theory and practice of project managem ent	The research work of a student
20.	MGT7705 Effective project team managemen t	All parts of modern science management team project are represented. Considered the procedural human resources of the project. Particular attention is paid to the socio-psychological structure of the team. The stages of team development are considered in detail. Spatial-temporal characteristics of the conflict are studied: conditions, reasons, frequency and form of conflict interaction.	4	LO4 LO14	MGT770 1Theory and practice of project managem ent	The research work of a student
21.	PM7107 Database managemen t methods and business analytics	The course studies methods and tools for modeling processes and systems, methods for modeling business processes of systems, basic means of computer modeling and organizing computational experiments. At the end of the course, undergraduates will master the skills of designing and developing the design of information systems and databases using modern cloud and network tasks. To solve problems, the course offers a range of computer tools to choose from.	4	LO7	SFT7110 Pattern recognitio n methods	The research work of a student
22.	PM7113 Modern data analysis tools	This course explores a cyclical process, including awareness of the degree of need for information protection and setting goals; collection and analysis of data on the state of information security in the organization; assessment of information risks; planning risk treatment measures; implementation and implementation of security in projects	4	LO7	-	The research work of a student
		MRW cycle Compulsory component				
23.	RW7001 The research work of a student	The purpose of the master's degree student's research work is to develop general cultural and professional competencies necessary for conducting both independent research work, the result of which is the writing and successful defense of a master's dissertation (project), and research work as part of a research team.	24	LO13	RM7101 Scientific research methods PP7101 Research practice	

12. Curriculum of the educational program (Platonus)

CURRICULUM OF THE EDUCATIONAL PROGRAM
for 2025-2027 Academic year
for Educational Program "7M06104-IT Project Management"
Education Field 7M06 – Information and Communication technologies
Training Direction 7M061 – Information and Communication technologies
Group of educational programs M094 – Information technologies
Degree: Master of technical sciences
Form of study: Full 2 year
Direction: Scientific and pedagogical
Year of admission: 01-09-2025

№	Module name	Discipline cycle	Discipline component	Code of discipline	Name of discipline	Academic credits	Control in the academic period					Volume of hours							Distribution of credits per academic period			
							Exams	Differentiated test(practice)	Differentiated test(course paper)	Practice/SRW	Term paper/project	Total	In-class learning	including			MSIWT	MSIW	1 course		2 course	
														Lectures	Practice	Lab practicals			1	2	3	4
																			Number of weeks in the academic period			
																			15	15	15	15
Modules of specialty/education programm																						
1	BM7101 Innovation and financial management	BD	EC	PM7707	Innovation management	5	2					150.0	45.0	15	30	0	15	90		5.0		
2		BD		PM7702	Start-ups and innovation management		2						45.0	15	30	0	15	90				

3		BD	EC	ECO7701	Economics for managers	5	1					150.0	45.0	15	30	0	15	90	5.0			
4		BD		MRK7701	Marketing management		1						45.0	15	30	0	15	90				
5		BD	EC	FIN7701	Advanced Financial Management	5	3					150.0	45.0	15	30	0	15	90			5.0	
6		BD		PM7701	Financial project management		3						45.0	15	30	0	15	90				
7	BM7100 Humanitarian and pedagogical	BD	UC	SPS7007	Higher education: psychological and pedagogical development strategies	6	1					180.0	60.0	30	30	0	15	105	6.0			
8		BD	UC	LAN7001A	Foreign language (professional)	5	1					150.0	45.0	0	45	0	15	90	5.0			
9		BD	UC	SPS 7001	History and philosophy of science	5	2					150.0	45.0	30	15	0	15	90		5.0		
10		BD	UC	PP7100	Teaching practice	4				120		120.0		0	0	0	0	0		4.0		
11	PM7100 Project and quality management	MD	UC	MGT7701	Theory and practice of project management	5	1					150.0	45.0	15	30	0	15	90	5.0			
12		MD	UC	PM7103	Project quality and risk management	4	3					120.0	45.0	15	30	0	15	60			4.0	
13		MD	EC	PM7705	Project stakeholders and integration management	4	3					120.0	45.0	15	30	0	15	60			4.0	

14		MD		MGT7705	Effective project team management		3						45.0	15	30	0	15	60				
15	PM7102 Scientific research	MD	UC	RM7101	Scientific research methods	5	2					150.0	45.0	15	30	0	15	90		5.0		
16		MD	UC	PP7101	Research practice	8				240		240.0		0	0	0	0	0			8.0	
17	PM7103 Analytics and management	MD	UC	SFT7134	Business process management	5	2					150.0	45.0	15	30	0	15	90		5.0		
18		MD	UC	SFT7133	Analysis and design of information systems architecture	4	4					120.0	45.0	15	30	0	15	60				4.0
19		MD	EC	PM7113	Modern data analysis tools	4	4					120.0	45.0	15	30	0	15	60				4.0
20		MD		PM7107	Database management methods and business analytics		4						45.0	15	30	0	15	60				
21	PM7101 Modeling and intelligent technologies	MD	UC	SFT7110	Pattern recognition methods	5	1					150.0	45.0	15	30	0	15	90	5.0			
22		MD	UC	SFT7109	Mathematical programming	5	1					150.0	45.0	15	30	0	15	90	5.0			
23		MD	UC	PM7102	Intelligent methods of IP and project management	4	3					120.0	45.0	15	30	0	15	60			4.0	
24	Scientific research work	RW	RC	RW7001	The research work of a student, including an internship and	2				60		60.0		0	0	0	0	0	2.0			

					implementation of master's thesis																
25		RW	RC	RW7002	The research work of a student, including an internship and implementation of master's thesis	3				120		120.0		0	0	0	0	0		3.0		
26		RW	RC	RW7003	The research work of a student, including an internship and implementation of master's thesis	5				540		540.0		0	0	0	0	0			5.0	
27		RW	RC	RW7008	The research work of a mas-ter"s student, including an in-ternship and implementation of master"s thesis	14				420		420.0		0	0	0	0	0				14.0
Weekly average workload at hours																		0	0	0	0
1	**General education disciplines (GED)**					**0**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Required component (GED/RC)					0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	University component (GED/UC)					0		0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Elective component (GED/EC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	**Basic disciplines (BD)**	**35**		**0**	**0**	**120**	**0**	**1050**	**285**	**105**	**180**	**0**	**90**	**555**	**16**	**14**	**5**	**0**
	Required component (BD/RC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	University component(BD/UC)	20		0	0	120	0	600	150	60	90	0	45	285	11	9	0	0
	Elective component (BD/EC)	15		0	0	0	0	450	135	45	90	0	45	270	5	5	5	0
3	**Major disciplines (MD)**	**53**		**0**	**0**	**240**	**0**	**1590**	**450**	**150**	**300**	**0**	**150**	**750**	**15**	**10**	**20**	**8**
	Required component (MD/RC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	University component (MD/UC)	45		0	0	240	0	1350	360	120	240	0	120	630	15	10	16	4
	Elective component (MD/EC)	8		0	0	0	0	240	90	30	60	0	30	120	0	0	4	4
4	**Disciplines for the formation of professional competencies (BDFPC)**	**0**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Required component (BDFPC/RC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	University component (BDFPC/UC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Elective component (BDFPC/EC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	**Disciplines of personal development and the formation of leadership qualities(BDPD)**	**0**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Required component (BDFPC/RC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	University component (BDFPC/UC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Elective component (BDFPC/EC)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total of theoretical course		88	16	0	0	360	0	2640	735	255	480	0	240	1305	31.0	24.0	25.0	8.0
USRW/UERW/DSRW		24	0	0	0	1140	0	1140	0	0	0	0	0	0	2.0	3.0	5.0	14.0
AC	**Additional courses**								0									
FA	**Final attestation**	8						240.0										
	Registration and defense of a master's thesis	**8**				**4**		**240**										
	Total	**120**				**1504**		**4020**	**735**	**255**	**480**	**0**	**240**	**1305**				