


«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

EDUCATIONAL PROGRAM



6B06115 - IT management

code and name of the educational program

Level: *bachelor's*


Approved
by the Board of Directors of JSC
«Kulazhanov KazUTB» «02.04» 2025,
protocol No. 8

Recommended
by the Academic Council of JSC
«Kulazhanov KazUTB» «2.03» 2025,
protocol No. 8


Astana – 2025

©Is the intellectual property of JSC «KazUTB named after K.Kulazhanov»
Reprinting and/or further transfer to third parties is prohibited

«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	


CONTENT

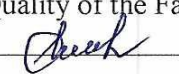
Preface	3
Approval sheet	4
1 Passport of the educational program	5
2 Qualification characteristics of a graduate of an educational program	6
3 Requirements for the content of the educational program	7
4 Additional educational programs (minor)	7
5 Competency map of the educational program	7
6 Learning outcomes of the educational program and modules	10
7 The relationship between the attainability of the formed learning outcomes according to the educational program and academic disciplines	15
8 Alignment of planned learning outcomes with assessment technologies and teaching methods within the module	53
9 Correlation of learning outcomes of the educational program with the labor functions of professional standards	55
10 Graduate model	48
11 Typical curriculum (appendix to the OP)	50
12 Expert opinion	57

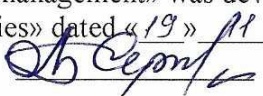
«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	


Preface

Educational program «6B06115 - IT – management» was developed in accordance with the requirements of the State Mandatory Standard of Higher and Postgraduate Education, approved by Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2 (amendment and supplement dated 02/20/2023) and based on professional standards «Business analysis in information and communication technologies» (Appendix No. 2 to the order of the executive duties of the Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan «Atameken» No. 222 dated 05.12.2022), «Database administration» (Appendix No. 1 to the order of the Acting Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan «Atameken» No. 222 dated 05.12.2022), «Software development» (Appendix No. 7 to the order of the Acting Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan «Atameken» No. 222 dated 05.12.2022)

The educational program «6B06115 IT – management» was approved at the meeting of the Council on Academic Quality on «17» 03 2025, protocol No. 4
Chairman Baibolova L.K. 

The educational program «6B06115 IT – management» was approved at the meeting of the Commission on Academic Quality of the Faculty on «Technology» 29.11 2024, protocol No. 2
Chairman Zhunusova G.S. 

The educational program «6B06115 IT – management» was developed and discussed at the meeting of the department «Information technologies» dated «19» 11 2024, protocol No. 4
Head of the department Serimbetov B.A. 

«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

Approval sheet

Educational program «6B06115- IT-management»

AGREED:

Vice-Rector for
Administrative Affairs


E. Askarbekov
«Қ.Құлажанов атындағы Қазақ
технология және бизнес университеті» АҚ
**ОҚУ ӘІСТЕМЕЛІК
БӨЛІМІ**
PP

" 27 " 03 2025 year

Head of Educational
Programs Department


B. Bayadilova
PP

" 27 " 03 2025 year

Director of LLP «Digital
Systems Engineering»


E. Zhantlessov
PP
«Digital Systems Engineering»

" 19 " 11 2024 year

Director, Product LLP
«Arta Software Product»


K. Serikov
PP
ARTA
TOO «Arta Software»
РЕСПУБЛИКА КАЗАХСТАН ГОРОДА АСТАНА

" 19 " 11 2024 year

Systems Technician
Trade and Economic
College


B. Khudabay
PP
«Техникалық және Экономикалық
Колледжі»

" 19 " 11 2024 year

Business Development
Director of LLP
«Tax&Communications»


A. Talgatbekuly
PP
Tax&Communications
ЖШС
СЧП 221240016165
РЕСПУБЛИКА КАЗАХСТАН, АСТАНА

" 19 " 11 2024 year

Software engineer of
RGP on PHV IVC
Bureau of National
Statistics. Agency for
Strategic Planning and
Reforms



G. Begimova
PP
«Қазақстан Республикасының
Статистика және Экономикалық
Жоспарлау және Стратегиялық
Жоспарлау Агенттігі»

" 19 " 11 2024 year

Student of group
ITM 222



A.C. Moldayakov
PP

" 19 " 11 2024 year

«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

1 Passport of the educational program

International Standard Classification of Education (ISCED) level	6
National Qualification Framework (NQF) level	6
Sectoral Qualifications Framework (SQF) level	6
Code and name of the field of education	6B06 Information and Communication technologies
Direction of training	6B061 Information and Communication technologies
Number and name of the group of educational programs	B057 Information technologies
Code and name of the educational program (EP)	6B06115 IT management
Educational program profile	Higher education in the field of Information and Communication Technology
Goal of the educational program	Training of competitive specialists of IT services of enterprises and state institutions who are able to develop the architecture and IT infrastructure of small and medium-sized businesses, who have a high culture, a sufficient level of knowledge and practical experience in the field of IT management.
Completion criterion of an educational program	240 academic credits
Language of instruction of the educational program	Russian, Kazakh
Distinctive features of the educational program	-
Partner University	-


«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

2 Qualification characteristics of a graduate of an educational program

Degree awarded	Bachelor's degree in information and communication technologies in the educational program «6B06115 IT management»
Field of professional activity	The field of professional activity of a manager is ensuring effective management of information resources and information systems at the organizational level, ensuring the use of information as a strategic resource, organizing management systems in the information business industry, improving management in accordance with socio-economic development trends.
Types of professional activities	Types of professional activity:
Object of professional activity	The objects of professional activity of a manager are various information resources and information systems of organizations in the economic, industrial and social spheres, information resources and information systems of divisions of management systems of state-owned enterprises, joint-stock companies and private firms, as well as various organizations in the field of information business. The professional activity of a manager also extends to information resources and information systems of scientific and production associations, scientific, design and design organizations, government agencies and the social infrastructure of the national economy.
Functions of professional activity	The main functions of graduates' professional activities are: - collection, processing and analysis of information about the factors of the external and internal environment of the organization for making managerial decisions; - creation and maintenance of databases on various indicators of the functioning of organizations; - development of the organization's internal document management system; - evaluation of the effectiveness of projects; - preparation of reports on the results of information and analytical activities; - assessment of the effectiveness of management decisions; - participation in the development and implementation of the corporate and competitive strategy of the organization, as well as functional strategies (marketing, financial, personnel); - organization of the work of performers (teams of performers) for the implementation of specific projects, activities, works; - development and implementation of projects aimed at the development of an organization (enterprise, management body); - control of the activities of departments, teams (groups) of employees; - motivation and stimulation of the organization's personnel aimed at achieving strategic and operational goals.

3 Requirements for the content of the educational program

Name of cycles and disciplines	Workload in academic credits
Cycle of general education disciplines (GED)	56
Required component	41
University component	5
Cycle of basic disciplines (BD)	82

«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

University component	30
Component of choice	52
Cycle of major disciplines (MD)	75
University component	10
Component of choice	65
Professional practice	19
Final assessment	8
Total	240


4 Additional educational programs (minor)

4.1 Minor «Modern aspects of artificial intelligence application»


Name of disciplines	Workload in academic credits
Introduction to Artificial Intelligence	5
Neural networks and their applications	5
Artificial intelligence in object management	5
Total	15

5 Competency map of the educational program «6B06115- IT management»

Competence map of the educational program	Learning outcome code	Learning Outcome (according to Bloom's Taxonomy)
Behavioral skills and personality traits (Softskills)	LO _{GEK1}	Forms a system of general competencies that ensure the socio-cultural development of the future specialist's personality, based on the formation of their worldview, civic, and moral stance, oriented towards a healthy lifestyle.
	LO _{GEK2}	Capable of communication in both oral and written forms in Kazakh, Russian, and foreign languages to solve tasks related to interpersonal, intercultural, and professional communication
	LO _{GEK3}	Promotes the development of information literacy through the mastery and use of modern information and communication technologies in all areas of activity.
	LO1	Develops competencies in the field of financial and economic analysis, anti-corruption culture, legal literacy, startup launch and business planning, using digital marketing tools, optimizing business processes, as well as demonstrating communication skills in the IT environment.
	LO2	Able to effectively manage IT projects and client relationships based on management fundamentals, international standards and project management tools, using Customer Development approach, promoting


«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	


		business on the Internet improving corporate IT infrastructure.
	LO3	Applies principles and methods of mathematics, numerical calculations, physics and scientific research to solve engineering and technical problems in the field of information technology, ensuring a science-based approach in professional activities.
Digital competencies (Digital skills)	LO4	Uses programming models and methods on various platforms and programming languages, testing the resulting solutions throughout their information systems lifecycle.
	LO5	Uses various models and methods of neural networks, artificial intelligence and expert systems, applying them in the management of various objects and the analysis of complex processes.
	LO6	It operates databases, computer data processing systems, cloud databases and Big Data methods, providing analytical processing and storage of large amounts of information.
Professional skills (Hardskills)	LO7	Carries out the design and development of web applications, programming of mobile applications (iOS and Android), forming the architecture of information systems, ensuring scalability and efficiency of IT solutions.
	LO8	Provides comprehensive information security based on cryptographic methods, taking into account the principles of sustainable development, ecology and life safety.
	LO9	Analyzes database network architectures, administers operating systems, and uses tools to maintain a stable IT infrastructure by managing systems and providing a stable IT environment.
	LO10	Synthesizes knowledge about DevOps and continuous integration tools, using computer and visual modeling skills, knowledge of standards and methodology for software development and maintenance.
	LO11	Demonstrates ability in IT management in various industries, use of Smart-technologies, design of management systems, application of international standards and methodologies of project management, as well as principles of standardisation, certification and measurement tools.

«K. Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

6 Learning outcomes of the educational program and modules

Key competencies	Learning Outcomes (LO) for the educational program	Name of module	Learning outcomes for the module	Name of disciplines that form learning outcomes
Soft skills	<p>LOGEK1 Forms a system of general competencies that ensure the socio-cultural development of the future specialist's personality, based on the formation of their worldview, civic, and moral stance, oriented towards a healthy lifestyle.</p>	<p>Man and Society – the foundation of the worldview and socio-political knowledge.</p>	<p>Applies the fundamental laws of Kazakhstan's history, philosophy, and socio-political knowledge for effective socialization and adaptation in changing socio-cultural conditions, shaping a personality capable of mobility in the modern world, critical thinking, and physical self-improvement.</p>	<p>Module of socio-political knowledge (political science, sociology, cultural studies, psychology) The history of Kazakhstan Philosophy Physical Culture</p>
	<p>LOGEK2 - Capable of communication in both oral and written forms in Kazakh, Russian, and foreign languages to solve tasks related to interpersonal, intercultural, and professional communication</p> <p>LOGEK3 – Promotes the development of information literacy through the mastery and use of modern information and communication technologies in all areas of activity.</p>	<p>Information and Communication Module Information and Communication Module</p>	<p>Capable of interpersonal social and professional communication in Kazakh, Russian, and foreign languages. Possesses various types of information and communication technologies for searching, storing, processing, protecting, and disseminating information.</p>	<p>Foreign language Kazakh (Russian) language Information and communication technologies</p>

«K. Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025													
Educational program	Edition 4	<table border="1"> <tr> <td data-bbox="284 1354 755 1848"> <p>LO 1- Develops competencies in the field of financial and economic analysis, anti-corruption culture, legal literacy, startup launch and business planning, using digital marketing tools, optimizing business processes, as well as demonstrating communication skills in the IT environment.</p> </td> <td data-bbox="284 1060 755 1354"> <p>Legal and Financial-Economic Literacy in Digital Environment</p> </td> <td data-bbox="284 567 755 1060"> <p>Possesses basic and applied knowledge in economics, law, and finance to launch projects and market them digitally.</p> </td> <td data-bbox="284 73 755 567"> <p>Module of economics, entrepreneurship, law and financial literacy (fundamentals of economics and entrepreneurship, basics of law and anti-corruption culture, basics of financial literacy) Economics and enterprise management Financial and economic analysis of projects Business promotion on the Internet Entrepreneurship and startup start-ups Business planning Business analysis and digital marketing Analysis and optimization of business processes Business communication in IT Management basics Customer Relationship Management Customer development (customer study methodology) IT project management methodologies and tools Corporate IT infrastructure</p> </td> </tr> <tr> <td data-bbox="755 1354 1209 1848"> <p>LO 2- Able to effectively manage IT projects and client relationships based on management fundamentals, international standards and project management tools, using Customer Development approach, promoting business on the Internet improving corporate IT infrastructure.</p> </td> <td data-bbox="755 1060 1209 1354"> <p>IT management and customer relationship management</p> </td> <td data-bbox="755 567 1209 1060"> <p>Manages HR projects and client relationships using Customer Development project management standards, as well as applying digital promotion and corporate HR management practices.</p> </td> <td data-bbox="755 73 1209 567"> <p>Business analysis and digital marketing Analysis and optimization of business processes Business communication in IT Management basics Customer Relationship Management Customer development (customer study methodology) IT project management methodologies and tools Corporate IT infrastructure</p> </td> </tr> <tr> <td data-bbox="1209 1354 1356 1848"> <p>LO 3 - Applies principles and methods of mathematics, numerical calculations, physics and scientific research to solve engineering and</p> </td> <td data-bbox="1209 1060 1356 1354"> <p>Applied scientific methods and mathematical apparatus in OT</p> </td> <td data-bbox="1209 567 1356 1060"> <p>Applies fundamental knowledge in mathematics, physics and computational methods in solving professional problems, demonstrating</p> </td> <td data-bbox="1209 73 1356 567"> <p>Algebra and Geometry Mathematical analysis Probability theory and mathematical statistics.</p> </td> </tr> </table>	<p>LO 1- Develops competencies in the field of financial and economic analysis, anti-corruption culture, legal literacy, startup launch and business planning, using digital marketing tools, optimizing business processes, as well as demonstrating communication skills in the IT environment.</p>	<p>Legal and Financial-Economic Literacy in Digital Environment</p>	<p>Possesses basic and applied knowledge in economics, law, and finance to launch projects and market them digitally.</p>	<p>Module of economics, entrepreneurship, law and financial literacy (fundamentals of economics and entrepreneurship, basics of law and anti-corruption culture, basics of financial literacy) Economics and enterprise management Financial and economic analysis of projects Business promotion on the Internet Entrepreneurship and startup start-ups Business planning Business analysis and digital marketing Analysis and optimization of business processes Business communication in IT Management basics Customer Relationship Management Customer development (customer study methodology) IT project management methodologies and tools Corporate IT infrastructure</p>	<p>LO 2- Able to effectively manage IT projects and client relationships based on management fundamentals, international standards and project management tools, using Customer Development approach, promoting business on the Internet improving corporate IT infrastructure.</p>	<p>IT management and customer relationship management</p>	<p>Manages HR projects and client relationships using Customer Development project management standards, as well as applying digital promotion and corporate HR management practices.</p>	<p>Business analysis and digital marketing Analysis and optimization of business processes Business communication in IT Management basics Customer Relationship Management Customer development (customer study methodology) IT project management methodologies and tools Corporate IT infrastructure</p>	<p>LO 3 - Applies principles and methods of mathematics, numerical calculations, physics and scientific research to solve engineering and</p>	<p>Applied scientific methods and mathematical apparatus in OT</p>	<p>Applies fundamental knowledge in mathematics, physics and computational methods in solving professional problems, demonstrating</p>	<p>Algebra and Geometry Mathematical analysis Probability theory and mathematical statistics.</p>
<p>LO 1- Develops competencies in the field of financial and economic analysis, anti-corruption culture, legal literacy, startup launch and business planning, using digital marketing tools, optimizing business processes, as well as demonstrating communication skills in the IT environment.</p>	<p>Legal and Financial-Economic Literacy in Digital Environment</p>	<p>Possesses basic and applied knowledge in economics, law, and finance to launch projects and market them digitally.</p>	<p>Module of economics, entrepreneurship, law and financial literacy (fundamentals of economics and entrepreneurship, basics of law and anti-corruption culture, basics of financial literacy) Economics and enterprise management Financial and economic analysis of projects Business promotion on the Internet Entrepreneurship and startup start-ups Business planning Business analysis and digital marketing Analysis and optimization of business processes Business communication in IT Management basics Customer Relationship Management Customer development (customer study methodology) IT project management methodologies and tools Corporate IT infrastructure</p>											
<p>LO 2- Able to effectively manage IT projects and client relationships based on management fundamentals, international standards and project management tools, using Customer Development approach, promoting business on the Internet improving corporate IT infrastructure.</p>	<p>IT management and customer relationship management</p>	<p>Manages HR projects and client relationships using Customer Development project management standards, as well as applying digital promotion and corporate HR management practices.</p>	<p>Business analysis and digital marketing Analysis and optimization of business processes Business communication in IT Management basics Customer Relationship Management Customer development (customer study methodology) IT project management methodologies and tools Corporate IT infrastructure</p>											
<p>LO 3 - Applies principles and methods of mathematics, numerical calculations, physics and scientific research to solve engineering and</p>	<p>Applied scientific methods and mathematical apparatus in OT</p>	<p>Applies fundamental knowledge in mathematics, physics and computational methods in solving professional problems, demonstrating</p>	<p>Algebra and Geometry Mathematical analysis Probability theory and mathematical statistics.</p>											


«K. Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025		Educational program	research skills and the ability to scientifically based analysis in the field of information technology.	Edition 4	Numerical methods Physics and the physical foundations of information technology Fundamentals of scientific research
technical problems in the field of information technology, ensuring a science-based approach in professional activities.	Basic and object-oriented programming	Develops software solutions in different languages and platforms, is able to design, test and maintain software products at all stages of their life cycle.	research skills and the ability to scientifically based analysis in the field of information technology.	Edition 4	Numerical methods Physics and the physical foundations of information technology Fundamentals of scientific research	
LO 4 - Uses programming models and methods on various platforms and programming languages, testing the resulting solutions throughout their information systems lifecycle.	Artificial intelligence and neural network technologies	Uses artificial intelligence technologies, including neural networks and expert systems, to analyze complex tasks and make management decisions in various subject areas.	Uses artificial intelligence technologies, including neural networks and expert systems, to analyze complex tasks and make management decisions in various subject areas.	Industrial practice II	Basics of programming in a language Python Object-oriented programming (Java) Algorithms, data structures, and programming (SI) Cross-platform programming Visual programming	
LO 5 - Uses various models and methods of neural networks, artificial intelligence and expert systems, applying them in the management of various objects and the analysis of complex processes.	Data storage and processing	Systems Organizes efficient work with databases, information storage and processing systems, including cloud and Big Data technologies, to	Systems Organizes efficient work with databases, information storage and processing systems, including cloud and Big Data technologies, to	Databases and DBMS Computer data processing systems Big Data Processing (Big data)	Computer organization and system programming Modern programming methods and tools	
LO 6 - It operates databases, computer data processing systems, cloud databases and Big Data						

Digital skills



	methods, providing analytical processing and storage of large amounts of information.		ensure reliability and analytical processing of large amounts of data.	Cloud databases
	LO 7 - Carries out the design and development of web applications, programming of mobile applications (iOS and Android), forming the architecture of information systems, ensuring scalability and efficiency of IT solutions.	Application design and development	Develops web applications and mobile solutions based on the architecture of information systems, ensuring scalability, efficiency and compliance with modern requirements.	Web application design and development Programming of mobile applications (iOS and Android) Design and development of information system architectures Web programming
	LO 8 - Provides comprehensive information security based on cryptographic methods, taking into account the principles of sustainable development, ecology and life safety.	Information and environmental security in the environment	Ensures information and digital security of the IT environment using cryptographic technologies and principles of sustainable development in professional and social activities.	Industrial practice I Information security and information protection Cryptographic methods of information protection Sustainable development, ecology and life safety
	LO 9 - Analyzes database network architectures, administers operating systems, and uses tools to maintain a stable IT infrastructure by managing systems and providing a stable IT environment.	Digital systems and infrastructure and operational administration	Administers the OT infrastructure, including network and operating systems, designs and maintains a stable architecture of digital solutions, ensuring their smooth operation.	Computer networks and computer network administration Network administration Operating systems Computer system architecture
	LO 10 - Synthesizes knowledge about DevOps and continuous integration tools, using computer and visual modeling skills, knowledge of standards and methodology for software development and	Software modeling and standardization	Integrates DevOps practices and software development standards with visual and computer modeling methods, optimizing the processes of analysis, maintenance and improvement of software products.	Fundamentals of systems theory Fundamentals of computer modeling Visual programming DevOps Basics Software development technology

Hardskills

«K. Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

maintenance.			and standardization
LO 11 - Demonstrates ability in IT management in various industries, use of Smart-technologies, design of management systems, application of international standards and methodologies of project management, as well as principles of standardisation, certification and measurement tools.	Smart technologies and standardization in HR management	Applies HR management approaches in industry areas, uses Smart technologies, knows management system design methods and knowledge in the field of international standardization and certification	IT analytics and forecasting Educational practice Information systems in industries Smart technologies Design of the control system International standards and methodologies for project management Standardization, certification and measuring instruments Pre-graduate practice /Industrial practice

7 The relationship between the attainability of the formed learning outcomes according to the educational program and academic disciplines

№	Name of the discipline	Number of credits	Formed learning outcomes (codes)													
	Brief description of the discipline		LO GEK1	LO GEK2	LO GEK3	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	LO11
Cycle of general education disciplines University component/Elective component																



Educational program

Edition 4

1	Foreign language	<p>This program is designed to provide training for students in the general education discipline «Foreign language» as one of the compulsory subjects of the general education cycle. The aim of the program is to form the intercultural and communicative competence of students in the process of foreign language education at a sufficient level (A2, pan-European competence) and the level of basic sufficiency (B1, pan-European competence). Depending on the level of training of students at the time of completion of the course, it reaches the B2 level of pan-European competence if the student's language level at the start is higher than the B1 level of pan-European competence.</p>	10	+													
2	Kazakh/Russian language	<p>This program in the general education discipline «Kazakh language» is aimed at a new format of language learning and the formation of socio-cultural knowledge, improving the student's communicative competence, and developing personal potential. This program is designed to develop the language personality of a student who is able to carry out cognitive and communicative activities in Russian in the areas of interpersonal, social, professional, and intercultural competence.</p>	10	+													



Educational program

Edition 4

3	Information and communication technologies	<p>communication in the context of the implementation of state programs for trilingualism and the spiritual modernization of national consciousness. The program is aimed at studying the updated content of the general education discipline «Information and Communication Technologies» (hereinafter referred to as the discipline), developing the ability to critically understand the role and significance of modern information and communication technologies in the era of digital globalization, forming a new «digital» mindset, acquiring knowledge and skills to use modern information and communication technologies in various activities.</p>	5			+									
4	Physical culture	<p>This program is aimed at studying the general education discipline «Physical Culture», which provides physical training in accordance with international educational standards. The program defines the joint cooperation of the teacher and the student in the process of physical education throughout the course of study in the context of the requirements for the level of mastery of the discipline.</p>	8			+									
5	The history of Kazakhstan	<p>The program consists of five thematic blocks: Ancient people, the formation of</p>	5			+									



		<p>a nomadic civilization, the Turkic civilization and the Great Steppe, Kazakhstan in the new era (XVIII –early XX centuries), Kazakhstan in the Soviet period, Independent Kazakhstan. The purpose of the discipline is to provide objective knowledge about the main stages of the development of the history of Kazakhstan from ancient times to the present.</p>					
6	<p>Module of socio-political knowledge (political science, sociology, cultural studies, psychology)</p>	<p>This program involves the study of four scientific disciplines – sociology, political science, cultural studies, psychology, each of which has its own subject, terminology and research methods. Interactions between these scientific disciplines are carried out on the basis of the principles of information complementarity; integrativity; methodological integrity of research approaches of these disciplines; commonality of result-oriented teaching methodology; a single systematic representation of the typology of learning outcomes as formed abilities. Within the disciplines of sociology and psychology, special attention is paid to inclusion as a key social and humanistic value. It is considered as an integral part of modern social and psychological knowledge, contributing to the formation</p>	8	+			



Educational program

Edition 4

7	Philosophy	of students' respect for social and individual diversity, recognition of human rights and principles of equality. This program is aimed at studying the updated content of the general education discipline «Philosophy», the formation of students' openness of consciousness, understanding of their own national code and national identity, spiritual modernization, competitiveness, realism and pragmatism, independent critical thinking, the cult of knowledge and education, the assimilation of key ideological concepts such as justice, dignity and freedom, and It is also aimed at developing and strengthening the values of tolerance, intercultural dialogue and a culture of peace.	5	+													
8	Module of economics, entrepreneurship, law and financial literacy (fundamentals of economics and entrepreneurship, basics of law and anti-corruption	Integrated discipline covers the fundamentals of economics, entrepreneurship, law and financial literacy. Examines key economic concepts, business principles, legal aspects of business and the basics of anti-corruption culture. Examines basic principles of financial planning, personal finance and investment management. Develops skills for effective economic decision-making, legal defense, building sustainable business competences and personal financial management	5														



Educational program

Edition 4

		<p>existing structures, the development of organizational transformation models and the application of modern management system design methods. Students master a process-oriented approach, methods of redesigning and implementing innovative solutions to improve business efficiency.</p>					
21	<p>Business communication in IT</p>	<p>The discipline is aimed at studying the functioning, architecture and varieties of blockchain technologies, as well as the areas of their practical application. The discipline provides for the development of criteria and justification of the effect of using the blockchain, as well as the consolidation of the principles of launching pilot projects. As a result, the student acquires knowledge about blockchain technologies, competencies in the analysis, development and evaluation of blockchain projects, as well as skills in critical thinking, practical application and teamwork.</p>	5	+			
22	<p>Operating systems</p>	<p>The discipline is aimed at the formation of theoretical knowledge in the field of building modern operating systems, methods of organizing computing processes, methods of developing algorithms for the interaction of application programs with the operating system and mechanisms for their implementation. Studies the purpose and</p>	5			+	




		<p>methods. Master the theoretical foundations and software tools of numerical methods of algebra, nonlinear algebraic equations, interpolation of functions, approximate calculation of integrals, methods and solving limit problems.</p>													
26	IT project management methodologies and tools	<p>The discipline is aimed at to form theoretical knowledge and a project management system in various economic fields, especially in the field of information technology development and implementation. Modern models and methods of project management are studied, as well as the structure of OT projects. The student acquires skills in the field of project management, including the processes of initiation, planning, implementation, monitoring and completion, development of project documentation, team management, and features of OT projects.</p>	5			+									
27	DevOps Basics	<p>The discipline is aimed to master technologies and tools to improve the efficiency of software development and operation, to master the DevOps methodology to eliminate barriers between teams. After studying the discipline, students gain an understanding of the principles of DevOps, skills in using automation tools,</p>	5											+	



28	Sustainable development, ecology and life safety	improving interaction between teams and increasing the efficiency of software development and operation processes. The course is aimed at forming a systemic understanding of the principles of ensuring balance between economy, social development of society, preservation of environment, protection of life and human health. Develops skills of effective management of energy and waste in the circular economy in the development of national strategies and implementation of business processes; analysis, forecasting and minimization of technological, natural and social risks; Sustainable lifestyle and responsible attitude to one's own security.	5														
29	Introduction to Artificial Intelligence	The discipline is aimed at studying the basic concepts, methods and technologies used in modern artificial intelligence systems. Looks at artificial neural networks, machine learning, deep learning, and applied algorithms and models used in various fields such as computer vision, natural language processing, robotics, and Game Art. Able to analyze and solve problems using artificial intelligence methods.	5														
30	Artificial intelligence in object	The discipline studies the basic concepts and principles of artificial intelligence systems, as well as their application in	5														



34	<p>programming (Java)</p>	<p>of systematic knowledge and practical skills in the field of object-oriented programming. The programming system, Java technology, the Eclipse development environment, data types, variables, operators, creation and use of objects are studied. After mastering the discipline, the student develops Java programs, works in Eclipse, applies object-oriented principles, optimizes code and debugs programs.</p>	5									
35	<p>Computer organization and system programming</p>	<p>The discipline is aimed at studying the basics of architecture and structure of modern operating systems and system software, the structural and functional scheme of a personal computer, the purpose, types and characteristics of central and external PC devices. Upon completion of the course, students will gain the skills and knowledge necessary to apply basic management and design techniques, model-based testing and verification, and compiler construction.</p>	5									
	<p>Databases and DBMS</p>	<p>The discipline studies the basic concepts of databases and the principles of database management systems (DBMS), data modeling, creation of SQL queries, as well as methods of data management and protection. Data design, the use of relational models and the use of modern tools are considered.</p>	5									

«K.Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

	Computer data processing systems	The discipline is aimed at acquiring system knowledge and practical skills in applying modern software systems for information search and systematization. Mastering the skills of using computer data processing tools and visualizing results. The course examines application software packages for data processing and analysis.	5												
--	----------------------------------	--	---	--	--	--	--	--	--	--	--	--	--	--	--

Cycle of major disciplines
University component/Elective component

36	Software development technology and standardization	The discipline is aimed at studying the processes, methodologies, and tools used in software development, with an emphasis on standards and quality requirements, and the stages of software product development, including planning, design, implementation, testing, implementation, and maintenance. Students will master the creation of technical documentation, models and architecture of the system, the use of UML and other visualization tools.	5												
37	Fundamentals of scientific research	The discipline is aimed at studying the scientific method, methods of data collection and analysis, as well as the stages of development and implementation of scientific research. The discipline forms students'	5												




Educational program

Edition 4

		<p>optimize the functioning of IT departments. After studying the discipline, the student knows about the principles of IT infrastructure management, acquires skills in using modern technologies to optimize IT processes, and is also able to plan and implement information system development projects in the economy.</p>				
55	Design of the control system	<p>The discipline is aimed at studying the issues related to the design and programming of technical control systems, the basics of the organization of software systems, standards and interfaces of system software, methods of diagnosis and configuration of software systems, the use of programming tools to create mathematical, technical and information support. The student acquires practical skills in designing, programming and using programming tools, as well as theoretical knowledge in this field.</p>	5			+
56	Big Data Processing (Big data)	<p>The discipline is aimed at studying the basics of working with big data, methods of their analysis, tools and technologies used in this field. The concept of big data, its characteristics, statistical methods, machine learning methods, data processing and visualization. The knowledge gained as a result of</p>	5		+	




		<p>environment. After studying the discipline, students acquire skills in analyzing economic processes, the ability to make informed decisions in enterprise management, as well as the ability to plan and implement company development strategies in the Kazakh market.</p>														
60	<p>International standards and methodologies for project management</p>	<p>The discipline is aimed at studying international standards and methodologies of project management, developing skills in project development and implementation using advanced management methods. Students learn the principles of strategic planning, risk analysis, project effectiveness assessment, and the application of PMI, PRINCE2, and Agile standards, integrating theoretical knowledge with practical skills for the successful implementation of IT projects.</p>	5													+
61	<p>Standardization, certification and measuring instruments</p>	<p>The discipline is aimed at providing students with knowledge and skills in the field of standardization, certification and measurements for the participation of enterprises in foreign economic activity and joining international certification systems. After studying the discipline, students acquire competencies in the basics of standardization, certification, working with measuring instruments and</p>	5													+


«K. Kulazhanov Kazakh University of Technology and Business» JSC		EP 27/02-18-2025													
Educational program		Edition 4													
1) collection, processing and generalization of practical material on the topic of the thesis (project); 2) analysis of statistical data and practical material on the topic of graduation research															
68	Final certification	The purpose of the final assessment is to evaluate the learning outcomes and key competencies achieved upon completion of the study of the higher education program.	8												

8 Alignment of planned learning outcomes with assessment technologies and teaching methods within the module

Learning Outcomes (LO) Number	Planned learning outcomes for the module	Methods of learning and teaching	Assessment technologies (tools)
LO1	Develops competencies in the field of financial and economic analysis, anti-corruption culture, legal literacy, startup launch and business planning, using digital marketing tools, optimizing business processes, as well as demonstrating communication skills in the IT environment.	Interactive lecture, discussion, Flipped Class	Test, colloquium, presentation, essay
LO 2	Able to effectively manage IT projects and client relationships based on management fundamentals, international standards and project management tools, using Customer Development approach, promoting business on the Internet improving corporate IT infrastructure.	Interactive lecture, discussion, group work	Test, colloquium, software product/project, control tasks

«K.Kulazhanov Kazakh University of Technology and Business» JSC		EP 27/02-18-2025	
Educational program		Edition 4	


LO 3	Applies principles and methods of mathematics, numerical calculations, physics and scientific research to solve engineering and technical problems in the field of information technology, ensuring a science-based approach in professional activities.	Interactive lecture, discussion, demonstration method, practical teaching method; group work	Project preparation, model building, colloquium
LO 4	Uses programming models and methods on various platforms and programming languages, testing the resulting solutions throughout their information systems lifecycle.	Interactive lecture, demonstration method, practical teaching method; working in groups	Presentation, questionnaire, test assignments, research work, creative work, independent work,
LO 5	Uses various models and methods of neural networks, artificial intelligence and expert systems, applying them in the management of various objects and the analysis of complex processes.	Interactive lecture, demonstration method, practical teaching method; working in groups	Calculation and graphic task, project preparation, problem solving, test
LO 6	It operates databases, computer data processing systems, cloud databases and Big Data methods, providing analytical processing and storage of large amounts of information.	Interactive lecture, demonstration method, practical teaching method; working in groups	Test, colloquium, oral exam , project defense
LO 7	Carries out the design and development of web applications, programming of mobile applications (iOS and Android), forming the architecture of information systems, ensuring scalability and efficiency of IT solutions.	Interactive lecture, demonstration method, practical teaching method; working in groups	Test control, written control, colloquium, calculation and graphic task
LO 8	Provides comprehensive information security based on cryptographic methods, taking into account the principles of sustainable development, ecology and life safety.	Interactive lecture, demonstration method, practical teaching method; working in groups	Test, colloquium, software product/project, control tasks
LO 9	Analyzes database network architectures, administers operating systems, and uses tools to maintain a stable IT infrastructure by managing systems and providing a stable IT environment.	Lecture, demonstration, modeling, educational and laboratory research. Project activities.	Control work, presentation, a case study, multi-level tasks and assignments. calculation and graphic work
LO 10	Synthesizes knowledge about DevOps and continuous	Interactive lecture,	Test control, written

«K.Kulazhanov Kazakh University of Technology and Business» JSC		EP 27/02-18-2025	
Educational program		Edition 4	


	integration tools, using computer and visual modeling skills, knowledge of standards and methodology for software development and maintenance.	demonstration method, practical teaching method; working in groups	control, colloquium, calculation and graphic task
LO 11	Demonstrates ability in IT management in various industries, use of Smart-technologies, design of management systems, application of international standards and methodologies of project management, as well as principles of standardisation, certification and measurement tools.	Lecture, explanation, modeling, educational and laboratory research. Project activities.	Test, colloquium, software product/project, control tasks

9 Correlation of learning outcomes of the educational program with the labor functions of professional standards (if any)

Name of the professional standards used	Professions at level 6 and/or 7 of the SQF	Labor functions	Tasks	Learning outcomes for the educational program
«Business analysis in information and communication technologies»	Specialist in business analysis in ICT (business analyst)	Labor function 1: Planning and monitoring business analysis work	Task 1: Coordinating the work of system analysts, programmers, and other specialists Task 2: Business dynamics and strategic management of the organization Task 3: Analysis of approaches of business planning of business processes of the organization	LO 1
		Labor function 2: Managing requirements for business processes and/or for the organization's ICT projects	Task 1: Project management FROM Task 2: Defining business process requirements	LO 2
		Labor function 3: Assessment and decision-making on improving business	Task 1: Development of recommendations on the introduction of new technologies for optimizing business processes	LO 1 LO 11

«K. Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

	processes and/or ICT projects of the organization	Task 2: Assessment of organizational readiness for changes in business processes	
Database Administration	Labor function 5: DBMS performance analysis and tuning Labor function 6: Ensuring the smooth operation of the DBMS	Task 1: Input and processing of both text and graphic data, working with databases Task 2: Analysis and identification of the causes of DBMS failures and their subsequent elimination. Task 1: Building and administering a cluster architecture of database servers Task 2: Development of rules of action in case of emergency situations related to the operation of the database, as well as during database restoration.	LO 6 LO 6
«Software Development»	Labor function 7: Managing database development Labor function 4: Software programming and testing «Software Designer»:	Task 1: Hardware and software market analysis Task 2: Planning software update activities Task 1: Creation and implementation of test scenarios to test the functionality of the software. Task 2: Ensuring compliance of the developed software with standards and security requirements. Task 3: Develop the program code in accordance with the project requirements. Task 1: Hardware and software market analysis Task 2: Planning software update activities	LO 4 LO 7 LO 10
Personal competence requirements	Labor function 5: Integration of software modules and software components Responsibility The ability to work in a team Organization Attentiveness Performance Striving for professional development Planning	Task 1: Hardware and software market analysis Task 2: Planning software update activities	LO 2 LO 10

«K. Kulazhanov Kazakh University of Technology and Business» JSC	EP 27/02-18-2025	
Educational program	Edition 4	

<p>Decision making Critical analysis Result orientation Creativity</p>
--

10 Graduate Model

Graduate Model		
Competencies (soft skills, digital skills)		
Graduate Attributes	Knowledge	Skills
<p>«Business analysis in information and communication technologies», «Database administration», «Software Development»</p> <ul style="list-style-type: none"> -Knows database administration tools -Is focused on ensuring fault tolerance and information security -Quickly identifies and fixes technical problems -Is capable of strategic planning for the development of IT infrastructure -Is ready to work in stressful and unusual situations -Is able to design and implement software solutions -Is able to test, debug and refine software code -Adheres to quality and security standards in software development -Is effective in team development -Adapts to changes and implements modern technologies 	<ul style="list-style-type: none"> -Fundamentals of IT management and digital transformation -Methodologies of flexible project management: Agile, Scrum, Lean, DevOps- Business analysis tools: BABOK, BPMN -BI-systems, SQL basics, data visualization methods -Ethics and security in the field of IT activities -Fundamentals of relational and non-relational database management systems (DBMS) -Clustering methods, data backup and recovery -Principles of DBMS performance and fault tolerance analysis -Hardware and software solutions for data storage and processing Programming principles and code architecture -Fundamentals of software testing and building test scenarios -Software quality and information security 	<ul style="list-style-type: none"> -Manage OT projects in the context of flexible methodologies (Agile, Scrum, etc.)-Formulate and implement HR strategies -Analyze and visualize data using BI tools-Interact effectively with stakeholders -Organize and coordinate the work of teams, conduct facilitations-Enter and process data in database management systems (DBMS) -Analyze failures and optimize DBMS performance -Design and administer cluster database architectures -Develop backup and recovery regulations --Plan updates to OT systems and evaluate technical solutions -Develop software based on technical documentation -Create and apply test scenarios to verify software solutions -Ensure that the program code complies with quality and safety standards

«K. Kulazhanov Kazakh University of Technology and Business»
JSC

EP 27/02-18-2025



Educational program

Edition 4

requirements

-Approaches to integrating software modules
-Modern programming languages and development environments

-Integrate software modules and components-
Upgrade and update software

Professional skills (hard skills)

- OT project management using Agile, Scrum, Waterfall
- Formalization of business requirements, process modeling (BPMN, UML)
- Data analysis, work with BI tools (SQL, Power BI)
- Use of digital platforms and DevOps tools for process automation
- Development of software code according to technical requirements
- Software testing and compliance control
- Integration and maintenance of modules and components of software systems
- Administration of relational and non-relational databases
- Design and support of cluster database architectures
- Performance optimization, troubleshooting, and development of recovery procedures
- Evaluation of OT resources, planning of updates and upgrades
- Maintenance of OT systems at all stages of the life cycle

Титульный учебный план / Titular curriculum
 606015 - IT-менеджер / 606015 - IT-менеджер / 606015 - IT-management

№ п/п	Наименование дисциплины / Discipline Name	Семестр / Semester	Формы контроля / Control Forms	Экспертная оценка / Expert Evaluation	Система кредитов / Credit System										Итого кредитов / Total Credits	Максимальная нагрузка / Maximum Load	Формы контроля / Control Forms					
					1	2	3	4	5	6	7	8	9	10				11	12	13	14	15
<p>Модуль / Module № 1</p> <p>1. Основы менеджмента / Fundamentals of Management 2. Основы маркетинга / Fundamentals of Marketing 3. Основы финансов / Fundamentals of Finance 4. Основы бухгалтерского учета / Fundamentals of Accounting 5. Информационные технологии в менеджменте / Information Technology in Management</p>																						
<p>Модуль / Module № 2</p> <p>1. Основы менеджмента / Fundamentals of Management 2. Основы маркетинга / Fundamentals of Marketing 3. Основы финансов / Fundamentals of Finance 4. Основы бухгалтерского учета / Fundamentals of Accounting 5. Информационные технологии в менеджменте / Information Technology in Management</p>																						
<p>Модуль / Module № 3</p> <p>1. Основы менеджмента / Fundamentals of Management 2. Основы маркетинга / Fundamentals of Marketing 3. Основы финансов / Fundamentals of Finance 4. Основы бухгалтерского учета / Fundamentals of Accounting 5. Информационные технологии в менеджменте / Information Technology in Management</p>																						
<p>Модуль / Module № 4</p> <p>1. Основы менеджмента / Fundamentals of Management 2. Основы маркетинга / Fundamentals of Marketing 3. Основы финансов / Fundamentals of Finance 4. Основы бухгалтерского учета / Fundamentals of Accounting 5. Информационные технологии в менеджменте / Information Technology in Management</p>																						

Модуль № / Module №	Таным № / Module №	Оқу бағдарламасының атауы / Name of teaching disciplines	Қысқартылған код / Abbreviated code	Семестр / Semester	Барлығы / Total hours	Аудиториялық жұмыс / Class work		Бағдарламаның негізгі бөлімдері / Main parts of the program	Семестр бойынша оқу бағдарламасының бөлімдері / Distribution of semesters				Оқу бағдарламасының жалпы ұзақтығы / Total duration of the program			
						1	2		3	4	5	6		7	8	
1	2	3	4	5	6 7 8 9	10	11 12 13 14 15	16	17	18	19	20	21	22	23	24

Ақпараттық-коммуникациялық технологиялар / Информационно-коммуникационные технологии / Information and Communication Module

Модуль / Module № 1	1	5	150	45	45	15	90	0+3+0	Білім алушының тәжірибелік дағдылары / Student's practical skills							
1	Қазақ (Орыс) тілі / Қазақша (Русский) тілі / Kazakh (Russian) language	ЖБП (МК) / ООД (ОК) / GER (CS)	КҚРҰа 1105-25 (1) / ҚРҰа 1105-25 (1) / ҚРҰа 1105-25 (1)	1	5	150	45	45	15	90	0+3+0	Білім алушының тәжірибелік дағдылары / Student's practical skills				
2	Шека тілі / Иностранний язык / Foreign language	ЖБП (МК) / ООД (ОК) / GER (CS)	ІҰа 1104-25 (1) / ІҰа 1104-25 (1) / ІҰа 1104-25 (1)	1	5	150	45	45	15	90	0+3+0	Білім алушының тәжірибелік дағдылары / Student's practical skills				
3	Қазақ (Орыс) тілі / Қазақша (Русский) тілі / Kazakh (Russian) language	ЖБП (МК) / ООД (ОК) / GER (CS)	КҚРҰа 1105-25 (2) / ҚРҰа 1105-25 (2) / ҚРҰа 1105-25 (2)	2	5	150	45	45	15	90	0+3+0	Білім алушының тәжірибелік дағдылары / Student's practical skills				
4	Шека тілі / Иностранний язык / Foreign language	ЖБП (МК) / ООД (ОК) / GER (CS)	ІҰа 1104-25 (2) / ІҰа 1104-25 (2) / ІҰа 1104-25 (2)	2	5	150	45	45	15	90	0+3+0	Білім алушының тәжірибелік дағдылары / Student's practical skills				
5	Ақпараттық-коммуникациялық технологиялар / Информационно-коммуникационные технологии / Information and communication technologies	ЖБП (МК) / ООД (ОК) / GER (CS)	ІКТ 1108-25 / ІКТ 1108-25 / ІКТ 1108-25	2	5	150	45	15	30	15	90	1+0+2	Білім алушының тәжірибелік дағдылары / Student's practical skills			
				25	750	225	15	180	30	75	450					

Адам және қоғам – дүниетанымы және нормалық-саяси білімдер / Человек и общество – основы мировоззренческой и социально-политических знаний / Man and Society – the foundation of worldview and socio-political knowledge

Модуль № 2	1 <th>5</th> <th>150 <th>45</th> <th>30 <th>15</th> <th>90 <th>2+1+0</th> <th>Білім алушының тәжірибелік дағдылары / Student's practical skills</th> </th></th></th>	5	150 <th>45</th> <th>30 <th>15</th> <th>90 <th>2+1+0</th> <th>Білім алушының тәжірибелік дағдылары / Student's practical skills</th> </th></th>	45	30 <th>15</th> <th>90 <th>2+1+0</th> <th>Білім алушының тәжірибелік дағдылары / Student's practical skills</th> </th>	15	90 <th>2+1+0</th> <th>Білім алушының тәжірибелік дағдылары / Student's practical skills</th>	2+1+0	Білім алушының тәжірибелік дағдылары / Student's practical skills			
1	Қазақстан тарихы / История Казахстана / History of Kazakhstan	ЖБП (МК) / ООД (ОК) / GER (CS)	ІК 1101-25 / ІК 1101-25 / ІК 1101-25	1	5	150	45	30	15	90	2+1+0	Білім алушының тәжірибелік дағдылары / Student's practical skills
2	Физикалық мәдениет / Физическая культура / Physical Culture	ЖБП (МК) / ООД (ОК) / GER (CS)	ФМК 1106-25 (1) / ФМК 1106-25 (1) / ФМК 1106-25 (1)	1	2	60	30	30	30	0+2+0		Білім алушының тәжірибелік дағдылары / Student's practical skills
3	Дене шынықтыру / Физическая культура / Physical Culture	ЖБП (МК) / ООД (ОК) / GER (CS)	ФМК 1106-25 (2) / ФМК 1106-25 (2) / ФМК 1106-25 (2)	2	2	60	30	30	30	0+2+0		Білім алушының тәжірибелік дағдылары / Student's practical skills

4	Культурно-эстетический блок модуля (образовательный, эстетический, модуль эстетического воспитания)	ЖЕЛ (AKO) ООД (OKO) GER (CS)	MSFZ 2103-25 MSFZ 2103-25 MSFZ 2103-25	3	8	240	120	60	60	15	105	4 + 4 + 0	Без аудиторных занятий
5	Денежная культура Physical Culture	ЖЕЛ (AKO) ООД (OKO) GER (CS)	PKK 1106-25(3) PKK 1106-25(3) PKK 1106-25(3)	3	2	60	30	30	30	30	0 + 2 + 0	Без аудиторных занятий	
6	Философия Philosophy	ЖЕЛ (AKO) ООД (OKO) GER (CS)	FI 2102-25 FI 2102-25 FI 2102-25	4	5	150	45	30	15	15	90	2 + 1 + 0	Без аудиторных занятий
7	Денежная культура Physical Culture	ЖЕЛ (AKO) ООД (OKO) GER (CS)	PKK 1106-25(4) PKK 1106-25(4) PKK 1106-25(4)	4	2	60	30	30	30	30	0 + 2 + 0	Без аудиторных занятий	
Всего по модулю / Total for module				26	26	780	330	120	210	0	45	405	

Цифровая грамотность и навыки / Правильно и финансово-экономическая грамотность в цифровой среде / Legal, financial and economic literacy in the digital environment

1	Экономическая грамотность, навыки и навыки цифровой грамотности / Экономическая грамотность, навыки и навыки цифровой грамотности	ЖЕЛ (AKO) ООД (OKO) GER (CS)	MEPRFG 1107-25 MEPRFG 1107-25 MEPRFG 1107-25	2	5	150	45	30	15	15	90	2 + 1 + 0	Без аудиторных занятий
2	IT-коммуникация и IT-коммуникация / Business communication in IT	БП (IK) БД (KB) BS (ES)	БКПТ 3213 - 25 БКПТ 3213 - 25 БКПТ 3213 - 25	3	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
3	Бизнес-процессы в бизнесе / Analysis and optimization of business processes	БП (IK) БД (KB) BS (ES)	АОБР 3213 - 25 АОБР 3213 - 25 АОБР 3213 - 25	3	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
4	Жизненные навыки / Financial and economic analysis of projects	БП (IK) БД (KB) BS (ES)	FEAP 4280-25 FEAP 4280-25 FEAP 4280-25	7	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
5	Бизнес-планирование / Business planning	БП (IK) БД (KB) BS (ES)	BP 4280-25 BP 4280-25 BP 4280-25	7	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
6	Бизнес-анализ и маркетинг / Business analysis and digital marketing	БП (IK) БД (KB) BS (ES)	BAOM 4327-25 BAOM 4327-25 BAOM 4327-25	7	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
7	Интернет-бизнес / Business promotion on the Internet	БП (IK) БД (KB) BS (ES)	PH 4325-25 PH 4325-25 PH 4325-25	8	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
8	Креативные стартапы / Entrepreneurship and start-up	БП (IK) БД (KB) BS (ES)	PZS 4325-25 PZS 4325-25 PZS 4325-25	8	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
9	Экономическая грамотность / Economists and enterprise management	БП (IK) БД (KB) BS (ES)	EUP 4329-25 EUP 4329-25 EUP 4329-25	8	5	150	45	15	30	15	90	1 + 2 + 0	Без аудиторных занятий
Всего по модулю / Total for module				25	25	780	225	90	135	0	75	450	

Начальные навыки программирования / Основы объектно-ориентированного программирования / Basic and object-oriented programming

1	Алгоритмы, структуры данных и программирование (СИ) / Algorithms, data structures, and programming (SI)	БП (IK) БД (KB) BS (ES)	ASDP 1204-25 ASDP 1204-25 ASDP 1204-25	1	4	120	45	15	30	15	60	1 + 0 + 2	Без аудиторных занятий
2	Python-язык программирования / Python language programming	БП (IK) БД (KB) BS (ES)	OPYAP 1202-25 OPYAP 1202-25 OPYAP 1202-25	1	4	120	45	15	30	15	60	1 + 0 + 2	Без аудиторных занятий
3	Кросс-платформенное программирование / Cross-platform programming	БП (IK) БД (KB) BS (ES)	KPP 2210-25 KPP 2210-25 KPP 2210-25	1	4	120	45	15	30	15	60	1 + 0 + 2	Без аудиторных занятий
Всего по модулю / Total for module				3	3	360	135	45	90	45	180	3 + 0 + 6	

Модуль / Module №5	Объекты изучения ба. дарамажу (Ана) / Object-oriented programming (Java)	БП (П) / БД (КБ) / БС (БС)	ООП 2214 - 25	4	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
4	Объектно-ориентированное программирование (Java) / Object-oriented programming (Java)	БП (П) / БД (КБ) / БС (БС)	ООП 2214 - 25	4	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
5	Компьютерді Үйлестіруге және жұмыс бағдарламалары / Организация компьютера и сетевое программирование / Computer organization and system programming	БП (П) / БД (КБ) / БС (БС)	ОКСР 2214-25 / ОКСР 2214-25 / ОКСР 2214-25	4	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
6	Әділеттік практика ІІ / Практическое проектирование II / Informal Practice II	БП (П) / БД (КБ) / БС (БС)	БП 2-25 (П) / БП 2-25(П) / БП 2-25(П)	6	5	150	0				5 ипта / weeks		Билет алуудың ретпауы / По выбору обучающихся / By student's option
Барлығы модуль бойынша / Итого по модулю / Total for module				18	540	135	45	30	60	45	210		

АТ-дин қолданылатын әдістер және математикалық аппарат / Прикладные научные методы и математический аппарат в ИТ / Applied scientific methods and mathematical apparatus in IT

Модуль / Module №5	Алгебра және геометрия / Algebra and Geometry	БП (П) / БД (КБ) / БС (БС)	АГ 1203-25	1	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
1	Алгебра және геометрия / Algebra and Geometry	БП (П) / БД (КБ) / БС (БС)	АГ 1203-25 / АГ 1203-25 / АГ 1203-25	1	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
2	Математикалық талдау / Математический анализ / Mathematical analysis	БП (П) / БД (КБ) / БС (БС)	МА 1205-25 / МА 1205-25 / МА 1205-25	2	6	180	60	30	30	15	105	2+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
3	Ақпараттық технологиялардың физикасы және физикалық негіздері / Физика и физические основы информационных технологий / Physics and the physical foundations of information technology	БП (П) / БД (КБ) / БС (БС)	ФФОП 2207-25 / ФФОП 2207-25 / ФФОП 2207-25	3	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
4	Сандық әдістер / Численные методы / Numerical methods	БП (П) / БД (КБ) / БС (БС)	СМ 2206-25 / СМ 2206-25 / СМ 2206-25	3	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
5	Үлгілерді дәстүрлермен және математикалық статистикамен / Теория вероятностей и прикладная статистика / Probability theory and mathematical statistics	БП (П) / БД (КБ) / БС (БС)	ТМБС 2206-25 / ТМБС 2206-25 / ТМБС 2206-25	3	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
6	Ғылыми зерттеу әдістері / Основы научных исследований / Fundamentals of scientific research	БП (П) / БД (КБ) / БС (БС)	ОН 4328-25 / ОН 4328-25 / ОН 4328-25	6	5	150	45	15	30	15	90	1+2+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
Барлығы модуль бойынша / Итого по модулю / Total for module				26	780	240	90	150	0	75	465		

Шифрлық жүйелердің инфрақұрылымы және операциялық жүйелер / Инфраструктура информационных систем и операционные администрирование / Digital systems infrastructure and operational administration

Модуль / Module №6	Операциялық жүйелер / Операционные системы / Operating systems	БП (П) / БД (КБ) / БС (БС)	ОС 2208-25	3	5	150	45	15	30	15	90	1+0+2	Билет алуудың ретпауы / По выбору обучающихся / By student's option
1	Операциялық жүйелер / Операционные системы / Operating systems	БП (П) / БД (КБ) / БС (БС)	ОС 2208-25 / ОС 2208-25 / ОС 2208-25	3	5	150	45	15	30	15	90	1+0+2	Билет алуудың ретпауы / По выбору обучающихся / By student's option
2	Жүйелер теориясының негіздері / Основы теории систем / Fundamentals of systems theory	БП (П) / БД (КБ) / БС (БС)	ОТС 3346-25 / ОТС 3346-25 / ОТС 3346-25	4	4	120	45	15	30	15	60	1+0+2	Билет алуудың ретпауы / По выбору обучающихся / By student's option
3	Жетілік әкімшілеу / Сетевое администрирование / Network administration	БП (П) / БД (КБ) / БС (БС)	СА 2212-25 / СА 2212-25 / СА 2212-25	4	4	120	45	15	30	15	60	1+0+2	Билет алуудың ретпауы / По выбору обучающихся / By student's option
4	Компьютерлік желілер және желілерді әкімшілеу / Компьютерные сети и администрирование компьютерных сетей / Computer networks and computer network administration	БП (П) / БД (КБ) / БС (БС)	КСАКС 2212-25 / КСАКС 2212-25 / КСАКС 2212-25	9	9	270	90	30	0	60	30	150	
Барлығы модуль бойынша / Итого по модулю / Total for module				9	270	90	30	0	60	30	150		

Көрсаткіштерді жазбау және әзірлеу / Проектирование и разработка приложений / Application design and development

Модуль / Module №6	Веб-бағдарламалау / Web programming	БП (П) / БД (КБ) / БС (БС)	БП 2207-25	3	1	150	45	15	30	15	60	1+0+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option
1	Веб-бағдарламалау / Web programming	БП (П) / БД (КБ) / БС (БС)	БП 2207-25 / БП 2207-25 / БП 2207-25	3	1	150	45	15	30	15	60	1+0+0	Билет алуудың ретпауы / По выбору обучающихся / By student's option

Қолданушының аты / User name: _____

Университеттің аты / University name: _____

Ақпарат / Approved at the: _____

№ / No: _____

№ п/п	Наименование модуля / Module №	Содержание модуля / Module content	Экспертные оценки / Expert ratings		Средние значения / Average values		Всего часов / Total hours		Формы контроля / Control forms	По выбору обучающихся / By students' choice				
			Эксперт 1 / Expert 1	Эксперт 2 / Expert 2	Среднее / Average	Среднее / Average	Среднее / Average	Среднее / Average						
2	Багундвалсангчин төмнийг ашигласан өвөрмөц хөгжлийн хэрэгсэлүүд / Specialized tools and frameworks for mobile development using Kotlin	Современные методы и средства программирования / Modern programming methods and tools	SM/SP/3320-25	SM/SP/3320-25	SM/SP/3320-25	SM/SP/3320-25	150	0	5 недель / weeks	По выбору обучающихся / By students' choice				
3	Өндөр түвшний ашигласан өвөрмөц хөгжлийн хэрэгсэлүүд / Advanced mobile development frameworks	Өндөр түвшний ашигласан өвөрмөц хөгжлийн хэрэгсэлүүд / Advanced mobile development frameworks	PP/1-25 (IT)	PP/1-25 (IT)	PP/1-25 (IT)	PP/1-25 (IT)	150	0	5 недель / weeks	По выбору обучающихся / By students' choice				
4	Мобайл хөгжилтүүдийн баазууд (iOS, Android) / Mobile development basics (iOS and Android)	Программирование мобильных приложений (iOS and Android) / Programming of mobile applications (iOS and Android)	PM/3320-25	PM/3320-25	PM/3320-25	PM/3320-25	150	45	15 90	1 + 2 + 0	По выбору обучающихся / By students' choice			
5	Хүчинг үзүүлэлтүүдийн баазууд / Performance optimization basics	Хүчинг үзүүлэлтүүдийн баазууд / Performance optimization basics	OB/4332-25	OB/4332-25	OB/4332-25	OB/4332-25	150	45	15 90	1 + 2 + 0	По выбору обучающихся / By students' choice			
6	Ашигласан өвөрмөц хөгжлийн хэрэгсэлүүд / Mobile development frameworks	Ашигласан өвөрмөц хөгжлийн хэрэгсэлүүд / Mobile development frameworks	FR/AS/3218-25	FR/AS/3218-25	FR/AS/3218-25	FR/AS/3218-25	150	45	15 90	1 + 2 + 0	По выбору обучающихся / By students' choice			
7	Web хөгжилтүүдийн баазууд / Web development basics	Web хөгжилтүүдийн баазууд / Web development basics	PR/WR/3319-25	PR/WR/3319-25	PR/WR/3319-25	PR/WR/3319-25	150	45	15 90	1 + 2 + 0	По выбору обучающихся / By students' choice			
Баримал модуль багшигч / Total for module						20	600	135	45	90	0	45	270	

IT менежмент және клиенттің қатынастары бақырау / IT-менеджмент и управление клиентскими отношениями / IT management and customer relationship management

№ п/п	Наименование модуля / Module №	Содержание модуля / Module content	Экспертные оценки / Expert ratings		Средние значения / Average values		Всего часов / Total hours		Формы контроля / Control forms	По выбору обучающихся / By students' choice				
			Эксперт 1 / Expert 1	Эксперт 2 / Expert 2	Среднее / Average	Среднее / Average	Среднее / Average	Среднее / Average						
1	Менеджмент негіздері / Основы менеджмента / Management basics	Менеджмент негіздері / Основы менеджмента / Management basics	OM/2217-25	OM/2217-25	OM/2217-25	OM/2217-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice
2	Customer development (кеңестерді жеткізу әдістері) / Customer development (customer study methodology)	Customer development (кеңестерді жеткізу әдістері) / Customer development (customer study methodology)	GD/3389-25	GD/3389-25	GD/3389-25	GD/3389-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice
3	Управление взаимоотношениями с клиентами / Customer Relationship Management	Управление взаимоотношениями с клиентами / Customer Relationship Management	UZK/3389-25	UZK/3389-25	UZK/3389-25	UZK/3389-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice
4	Корпоративтік IT-инфрақұрылым / Corporate IT infrastructure	Корпоративтік IT-инфрақұрылым / Corporate IT infrastructure	KIT/4324-25	KIT/4324-25	KIT/4324-25	KIT/4324-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice
5	Бақырау жүйесін жобалау / Проектирование систем управления / Design of the control system	Бақырау жүйесін жобалау / Проектирование систем управления / Design of the control system	PSU/4323-25	PSU/4323-25	PSU/4323-25	PSU/4323-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice
Баримал модуль багшигч / Total for module						15	450	135	45	90	0	45	270	

Модельдер және БК стандарттары / Моделирование и стандартизация ПО / Software modeling and standardization

№ п/п	Наименование модуля / Module №	Содержание модуля / Module content	Экспертные оценки / Expert ratings		Средние значения / Average values		Всего часов / Total hours		Формы контроля / Control forms	По выбору обучающихся / By students' choice					
			Эксперт 1 / Expert 1	Эксперт 2 / Expert 2	Среднее / Average	Среднее / Average	Среднее / Average	Среднее / Average							
1	Визуальды модельдер / Визуальное моделирование / Visual programming	Визуальды модельдер / Визуальное моделирование / Visual programming	VM/2213-25	VM/2213-25	VM/2213-25	VM/2213-25	120	45	15	30	15	60	1 + 0 + 2	По выбору обучающихся / By students' choice	
2	Компьютерлік модельдер негіздері / Основы компьютерного моделирования / Fundamentals of computer modeling	Компьютерлік модельдер негіздері / Основы компьютерного моделирования / Fundamentals of computer modeling	OKM/2213-25	OKM/2213-25	OKM/2213-25	OKM/2213-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice	
3	DevOps негіздері / Основы DevOps	DevOps негіздері / Основы DevOps	ODO/4330-25	ODO/4330-25	ODO/4330-25	ODO/4330-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice	
4	Мобайл хөгжилтүүдін баазууд / Mobile development basics	Мобайл хөгжилтүүдін баазууд / Mobile development basics	MO/PP/3344-25	MO/PP/3344-25	MO/PP/3344-25	MO/PP/3344-25	150	45	15	30	15	90	1 + 2 + 0	По выбору обучающихся / By students' choice	
5	Оқу практикасы / Учебная практика / Educational practice	Оқу практикасы / Учебная практика / Educational practice	UP/25 (IT)	UP/25 (IT)	UP/25 (IT)	UP/25 (IT)	60	0	2	2	2	2	2	2	2
Баримал модуль багшигч / Total for module						2	60	0	2	2	2	2	2	2	2

6	БК өндіріс технологиясы және стандартты Технология разработки и стандартизации ИО Software development technology and standardization	БҒП (ӘКК) ЦД (БК) АС (УС)	TRSP0 3321-25 TRSP0 3321-25 TRSP0 3321-25	6	5	150	45	15	30	15	90	1+2+0	Білім алушының тапсырма бойынша
7	IT-құрылым және базасы IT-structure and base	БҒП (ТК) ЦД (КБ) АС (ЕС)	ITAP 4342-25 ITAP 4342-25 ITAP 4342-25	8	5	150	45	15	30	15	90	1+2+0	ауданының тапсырма бойынша
8	Видеолық бағдарламалау Видеолық программалау Visual programming	БҒП (ТК) ЦД (КБ) АС (ЕС)	BP 2207-25 BP 2207-25 BP 2207-25										По выбору обучающихся/ By student's option.
Барлығы модуль бойынша / Итого по модулю / Total for module				21		630	180	60	90	30	60	330	

Искусственный интеллект и нейросетевые технологии / Искусственный интеллект и нейросетевые технологии / Artificial intelligence and neural network technologies

Модуль / Module № 10													
1	Жасанды интеллектке кіріспе Введение в искусственный интеллект Introduction to Artificial Intelligence	БҒП (ТК) ЦД (КБ) ИС (УС)	BI 3216-25 BI 3216-25 BI 3216-25	5	5	150	45	15	30	15	90	1+2+0	Білім алушының тапсырма бойынша
2	Объектарды білудің түрлері мен әдістері Искусственный интеллект өзіндік ұйымдастыру объектісі Artificial intelligence in object management	БҒП (ТК) ЦД (КБ) ИС (УС)	IIIO 3216-25 IIIO 3216-25 IIIO 3216-25										По выбору обучающихся/ By student's option.
3	Жасанды интеллект және сәйпәтталмақ жүйелер Искусственный интеллект и экспертные системы Artificial intelligence and expert systems	БҒП (ТК) ЦД (КБ) АС (ЕС)	IIES 4327-25 IIES 4327-25 IIES 4327-25	7	5	150	45	15	30	15	90	1+2+0	ауданының тапсырма бойынша
4	Нейрондық желілер және сәйпәтталмақ жүйелер Нейронные сети и их приложения Neural networks and their applications	БҒП (ТК) ЦД (КБ) АС (ЕС)	NSIP 4327-25 NSIP 4327-25 NSIP 4327-25										По выбору обучающихся/ By student's option.
Барлығы модуль бойынша / Итого по модулю / Total for module				10		300	90	30	60	0	30	180	

Деректерді сақтау және өңдеу жүйелері / Системы хранения и обработки данных / Data storage and processing systems

Модуль / Module № 11													
1	Компьютерлік деректерді өңдеу жүйелері Компьютерные системы обработки данных Computer data processing systems	БҒП (ТК) БД (КБ) БС (ЕС)	KSOD 2208-25 KSOD 2208-25 KSOD 2208-25	5	5	150	45	15	30	15	90	1+2+0	Білім алушының тапсырма бойынша
2	Деректер базасы және ДКБЖК Базы данных и СУБД Databases and DBMS	БҒП (ТК) ЦД (КБ) АС (ЕС)	BDNSUBD 3215-25 BDNSUBD 3215-25 BDNSUBD 3215-25										По выбору обучающихся/ By student's option.
3	Үлкен деректерді өңдеу (Big Data) Обработка больших данных (Big data)	БҒП (ТК) ЦД (КБ) АС (ЕС)	OBDD 4331-25 OBDD 4331-25 OBDD 4331-25	7	5	150	45	15	30	15	90	1+2+0	ауданының тапсырма бойынша
4	Сылапарлағы өнеркәсіптік жүйелер Информационные системы в отрасли Information systems in industries	БҒП (ТК) ЦД (КБ) АС (ЕС)	ISIO 3319-25 ISIO 3319-25 ISIO 3319-25										По выбору обучающихся/ By student's option.
Барлығы модуль бойынша / Итого по модулю / Total for module				10		300	90	30	60	0	30	180	

Қоршаған ортаның амалдылық және экологиялық қауіпсіздігі / Информационная и экологическая безопасность в ИТ-сферах / Information and environmental security in the environment

Модуль / Module № 12													
1	Тұрақты даму, экология және терісінді қауіпсіздігі Устойчивое развитие, экология и безопасность жизнедеятельности Sustainable development, ecology and life safety	БҒП (ӘС) БД (БК) БС (УС)	UREBZA 3207-25 UREBZA 3207-25 UREBZA 3207-25	6	5	150	45	30	15	15	90	2+1+0	Білім алушының тапсырма бойынша
2	Ақпараттық қауіпсіздік және ақпаратты қорғау Информационная безопасность и защита информации Information security and information protection	БҒП (ТК) ЦД (КБ) АС (ЕС)	IBZI 1325-25 IBZI 1325-25 IBZI 1325-25										ауданының тапсырма бойынша
3	Ақпаратты қорғау және криптографиялық әдістер Криптографические методы защиты информации Cryptographic methods of information protection	БҒП (ТК) ЦД (КБ) АС (ЕС)	KMZ1 1325-25 KMZ1 1325-25 KMZ1 1325-25	6	5	150	45	15	30	15	90	1+2+0	По выбору обучающихся/ By student's option.

Барлығы модуль бойынша / Итого по модулю / Total for module		10	300	90	45	45	0	30	180										
АТ мамандықтары Smart-технологиялар және стандарттар / Smart technologies and standardization in IT management																			
Модуль / Module №13	Smart технологиялар Smart technologies	БІТ (ІТК) ІІІ (КБД) АС (ІС)	ST 4325-25 ST 4325-25 ST 4325-25		7	5	150	45	15	30	15	90	1+2+0						
	Компьютерлік жүйелерді құру Архитектура компьютерных систем Computer system architecture	БІТ (ІТК) ІІІ (КБД) АС (ІС)	AKS 3218-25 AKS 3218-25 AKS 3218-25																
	Тіркеу аспаптары жүйелерін / Обладания проекта Проектирование средств программного обеспечения Проектирование программного обеспечения	БІТ (ІТК) ІІІ (КБД) АС (ІС)	PDPPP 25 (ІТ) PDPPP 25 (ІТ) PDPPP 25 (ІТ)		8	7	210	0											
	Мемлекеттік стандарттар және стандарттарды меңгеру Международные стандарты и национальные стандарты International standards and national standards for standardization	БІТ (ІТК) ІІІ (КБД) АС (ІС)	MSMFM 4281-25 MSMFM 4281-25 MSMFM 4281-25		8	5	150	45	15	30	15	90	1+2+0						
	Стандарттар, сертификаттар және өлшеу құралдары Стандарты, сертификаты и средства измерения Standartization, certification and measuring instruments	БІТ (ІТК) ІІІ (КБД) АС (ІС)	SSIS 4335-25 SSIS 4335-25 SSIS 4335-25																
Барлығы модуль бойынша / Итого по модулю / Total for module					17	510	90	30	60	0	30	180							
Қорытынды аттестация / Итоговая аттестация / Final assessment																			
Модуль / Module №14	Қорытынды аттестация Итоговая аттестация Final certification				2	8	240												
	Барлығы модуль бойынша / Итого по модулю / Total for module				8	240	0	0	0	0	0	0							
БАРЛЫҒЫ МОДУЛЬДАР БОЙЫНША / ИТОГО ПО МОДУЛЯМ / TOTAL FOR MODULES					240	7200	20655	675	1200	180	615	3720							

Барлығы модуль бойынша / Итого по модулю / Total for module		10	300	90	45	45	0	30	180										
АТ мамандықтары Smart-технологиялар және стандарттар / Smart technologies and standardization in IT management																			
Модуль / Module №13	Smart технологиялар Smart technologies	БІТ (ІТК) ІІІ (КБД) АС (ІС)	ST 4325-25 ST 4325-25 ST 4325-25		7	5	150	45	15	30	15	90	1+2+0						
	Компьютерлік жүйелерді құру Архитектура компьютерных систем Computer system architecture	БІТ (ІТК) ІІІ (КБД) АС (ІС)	AKS 3218-25 AKS 3218-25 AKS 3218-25																
	Тіркеу аспаптары жүйелерін / Обладания проекта Проектирование средств программного обеспечения Проектирование программного обеспечения	БІТ (ІТК) ІІІ (КБД) АС (ІС)	PDPPP 25 (ІТ) PDPPP 25 (ІТ) PDPPP 25 (ІТ)		8	7	210	0											
	Мемлекеттік стандарттар және стандарттарды меңгеру Международные стандарты и национальные стандарты International standards and national standards for standardization	БІТ (ІТК) ІІІ (КБД) АС (ІС)	MSMFM 4281-25 MSMFM 4281-25 MSMFM 4281-25		8	5	150	45	15	30	15	90	1+2+0						
	Стандарттар, сертификаттар және өлшеу құралдары Стандарты, сертификаты и средства измерения Standartization, certification and measuring instruments	БІТ (ІТК) ІІІ (КБД) АС (ІС)	SSIS 4335-25 SSIS 4335-25 SSIS 4335-25																
Барлығы модуль бойынша / Итого по модулю / Total for module					17	510	90	30	60	0	30	180							
Қорытынды аттестация / Итоговая аттестация / Final assessment																			
Модуль / Module №14	Қорытынды аттестация Итоговая аттестация Final certification				2	8	240												
	Барлығы модуль бойынша / Итого по модулю / Total for module				8	240	0	0	0	0	0	0							
БАРЛЫҒЫ МОДУЛЬДАР БОЙЫНША / ИТОГО ПО МОДУЛЯМ / TOTAL FOR MODULES					240	7200	20655	675	1200	180	615	3720							

ЭКСПЕРТНОЕ ЗАКЛЮЧЕНИЕ

на образовательную программу 6B06115 - «IT-менеджмент»
АО «Казахский университет технологии и бизнеса» им. Кулажанова

Образовательная программа (ОП) 6B06115 – «IT-менеджмент», реализуемая в АО «Казахский университет технологии и бизнеса» по уровню бакалавриата, представляет собой целостный комплекс учебно-методических документов, регламентирующих цели, ожидаемые результаты обучения, содержание, условия и технологии реализации образовательного процесса, а также систему оценки качества подготовки выпускников. Программа соответствует нормативно-правовым актам Министерства науки и высшего образования Республики Казахстан.

ОП разработана и утверждена в соответствии с Государственными общеобязательными стандартами высшего и послевузовского образования (Приказ МОН РК от 31.10.2018 г. № 604, Приложение 5).

Цель программы – подготовка квалифицированных специалистов в области IT-менеджмента, обладающих современными знаниями и практическими навыками для успешной профессиональной деятельности в организациях различного профиля, способных разрабатывать и внедрять инновационные цифровые решения, а также содействовать развитию информационно-коммуникационных технологий в Казахстане.

Образовательная программа обеспечивает формирование у обучающихся как фундаментальной теоретической базы, так и прикладных компетенций, соответствующих требованиям современного рынка труда. Содержание программы охватывает широкий спектр дисциплин, включая основы IT-менеджмента, цифровую трансформацию, бизнес-аналитику, администрирование баз данных, разработку программного обеспечения и управление проектами.

Реализация программы обеспечивается высококвалифицированными педагогическими кадрами, активно занимающимися научной, учебно-методической и практической деятельностью.

Описание и оценка структуры образовательной программы.

Структура ОП включает следующие компоненты:
цикл общеобразовательных дисциплин - (51 кредитов);
цикл базовых дисциплин - (89 кредита);
цикл профилирующих дисциплин- 70 кредитов);
профессиональную практику - (20 кредита);
итоговую аттестацию- (8 кредитов);
общее количество кредитов составляет 240.

Выводы:

IT-менеджмент является стратегически значимой сферой в условиях цифровой трансформации общества и бизнеса. Специалисты данного профиля востребованы на рынке труда и обладают широкими возможностями карьерного роста.

Выпускники программы способны к проектированию, разработке, внедрению и сопровождению информационных систем, обеспечивающих автоматизацию бизнес-процессов, эффективное управление данными и поддержку принятия управленческих решений.

Образовательная программа 6B06115 – «IT-менеджмент» полностью соответствует современным образовательным и профессиональным требованиям, обеспечивает подготовку компетентных специалистов и рекомендуется к использованию в учебном процессе.

Директор ТОО
«Teclab Digital Solutions»



Глеубаева Арайлым Орынбайқызы

ЭКСПЕРТНОЕ ЗАКЛЮЧЕНИЕ

на образовательную программу 6В06115 - «IT-менеджмент»
АО «Казахский университет технологии и бизнеса» им. Кулажанова

Образовательная программа (ОП) 6В06115 – «IT-менеджмент», реализуемая в АО «Казахский университет технологии и бизнеса» по уровню бакалавриата, представляет собой целостный комплекс учебно-методических документов, регламентирующих цели, ожидаемые результаты обучения, содержание, условия и технологии реализации образовательного процесса, а также систему оценки качества подготовки выпускников. Программа соответствует нормативно-правовым актам Министерства науки и высшего образования Республики Казахстан.

ОП разработана и утверждена в соответствии с Государственными общеобязательными стандартами высшего и послевузовского образования (Приказ МОН РК от 31.10.2018 г. № 604, Приложение 5).

Цель программы – подготовка квалифицированных специалистов в области IT-менеджмента, обладающих современными знаниями и практическими навыками для успешной профессиональной деятельности в организациях различного профиля, способных разрабатывать и внедрять инновационные цифровые решения, а также содействовать развитию информационно-коммуникационных технологий в Казахстане.

Образовательная программа обеспечивает формирование у обучающихся как фундаментальной теоретической базы, так и прикладных компетенций, соответствующих требованиям современного рынка труда. Содержание программы охватывает широкий спектр дисциплин, включая основы IT-менеджмента, цифровую трансформацию, бизнес-аналитику, администрирование баз данных, разработку программного обеспечения и управление проектами.

Реализация программы обеспечивается высококвалифицированными педагогическими кадрами, активно занимающимися научной, учебно-методической и практической деятельностью.

Описание и оценка структуры образовательной программы.

Структура ОП включает следующие компоненты:

цикл общеобразовательных дисциплин - (51 кредитов);

цикл базовых дисциплин - (89 кредита);

цикл профилирующих дисциплин- 70 кредитов);

профессиональную практику - (20 кредита);

итоговую аттестацию- (8 кредитов);

общее количество кредитов составляет 240.

Выводы:

IT-менеджмент является стратегически значимой сферой в условиях цифровой трансформации общества и бизнеса. Специалисты данного профиля востребованы на рынке труда и обладают широкими возможностями карьерного роста.

Выпускники программы способны к проектированию, разработке, внедрению и сопровождению информационных систем, обеспечивающих автоматизацию бизнес-процессов, эффективное управление данными и поддержку принятия управленческих решений.

Образовательная программа 6В06115 – «IT-менеджмент» полностью соответствует современным образовательным и профессиональным требованиям, обеспечивает подготовку компетентных специалистов и рекомендуется к использованию в учебном процессе.

Генеральный директор ТОО
«КазТелКом»



Ходжабаев М.М.