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

Mustafina A.
«12» December 2024 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

7M06113 Digital Media Technologies and Data Visualization

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 "7M06113 – Digital Media Technologies and Data Visualization"

Duration of study: 2 years

Number of credits: 120

AGREED
HR Director LLP «Alash Media Group»

Tuleukhanova E.A.

«__» _____ 2025

Almaty, 2025

The code and name of the educational program: 7M06113 Digital Media Technologies and Data Visualization

№	Educational program developers (Position, scientific degree, academic degree, Full name)	Signature
1	A.A. Beisenkulov - Candidate of Philological Sciences, Associate Professor of the Department of Media Communications and the History of Kazakhstan.	
2	A.A. Niyazgulova - Candidate of Philological Sciences, Professor, Head of the Department of Media Communications and History of Kazakhstan.	

Contents

List of abbreviations and acronyms

BD	Cycle of basic disciplines
BC	Basic competency
BM	Basic module
UC	University component
HE	Higher education
NMS	National Mandatory Standards of Higher and Post-Graduate Education
ATT	Additional types of training
EQF	European qualifications framework
EFE	European foundation for education
KSA	Knowledge, Skills and Abilities
FA	Final attestation
EC	Elective component
ISCED	International Standard Classification of Education
NQF	National qualifications framework
NQS	National qualifications system
GHM	General humanitarian module
RC	Required component
GEM	General education module
GED	Cycle of general education disciplines
EP	Educational program
GPM	General professional module
SQF	Sectoral qualifications framework
GEC	General education competency
MD	Cycle of major disciplines
PI	Professional internship
PS	Professional standard
PE	Postgraduate education
PC	Professional competency
PM	Professional module
LO	Learning outcome
QMS	Quality Management System

1. Description of the educational program

Development of the digital economy, the IT sector, and the state program "Digital Kazakhstan" require new managerial specialists at the intersection of information technology, digital content, new media analytics, and information security. To meet the growing demands of the labor market, we recommend training master's degree holders in journalism with advanced competencies in IT, big data, artificial intelligence, and digital content.

2. Aim and objectives of the educational program

The purpose of the EP – Training of masters, middle managers at the intersection of sciences for the fields of information analytics, big data management, development of artificial intelligence and data visualization

AP objectives:

1. To prepare a specialist who possesses knowledge in the media sphere and journalism, ICT, computer science, information security, and business.
2. To teach master's students methods of researching large data sets containing fragmented information, such as market trends, customer preferences, etc.
3. To develop the ability to extract necessary information from various sources, including real-time information flows, analyze it for subsequent business decision-making, recognize logical connections within the collected information system, and based on this develop certain business decisions and models.
4. The master's student should know the research methodology in data science (formulating research goals, data collection, data processing and transformation, data exploration, model building and method selection, presentation and visualization of results), methods and approaches to data standardization and transformation, machine learning methods (basic classification and clustering methods), and data storage organization techniques.
5. The master's student should be able to solve applied problems in data processing and analysis to identify hidden dependencies, apply elements of probability theory and mathematical statistics underlying data science models and methods, correctly select machine learning methods for practical tasks, and organize data visualization.
6. The master's student should have skills working with tools for data storage organization and information protection, programming implementation skills in R and Python for data processing and analysis, as well as data preprocessing and visualization skills.
7. The master's student should possess skills for comprehensive analysis and analytical summarization of research results using modern scientific and technical achievements, skills for independent data collection, study, analysis, and summarization of scientific and technical information on the research topic, the ability to create theoretical models that predict properties of studied objects, and develop proposals for implementing results.

3. Passport of the academic program

№	Name	Description
1.	Education area code and classification	7M06 Information and Communication technologies
2.	Training direction code and classification	7M061 Information and Communication technologies
3.	Group of academic programs	M094 Information technologies
4.	Name of the educational program	7M06113 – Digital Media Technologies and Data Visualization
5.	Aim of the educational program	Training of masters, middle managers at the intersection of sciences for the fields of

		information analytics, big data management, development of artificial intelligence and data visualization
6.	Type of the educational program	New EP
7.	Level according to the National Classifications Framework	7
8.	Level according to the Sectoral Qualifications Framework	7
9.	Distinctive features of the program	-
10.	Partner University	-
11.	Academic degree awarded	Master of science in engineering in the educational program "7M06113 – Digital Media Technologies and Data Visualization"
12.	Duration of study	2 years
13.	Volume of credits	120
14.	Language of education	Kazakh-English, Russian-English, English
15.	Atlas of new professions	-
16.	Regional standard	-
17.	Availability of an attachment to the training license	available
18.	License number for the training area	KZ81LAM00001263
19.	Availability of program accreditation	NAAR
20.	Generated learning outcomes	LO1: master the technologies of creating virtual and augmented reality, computer graphics, 3D animation, master the methods of processing and analyzing images, new digital devices and digital media technologies for science and research. LO2: To master the methods of information processing, including methods of big data analysis, to be able to use analytical data in the social field, to know the algorithm of network operation, types of information storage, problems of forming large arrays and their processing. LO3: to study psychological and pedagogical strategies for the development of higher education, to master the psychological and social effects of the media, to form a scientific understanding of the theory and concepts of mass communication, to study the psychological and social effects of the media LO4: to develop skills in working with scientific information, skills of logical, systematic and critical thinking, to know the history and philosophy of scientific information LO5: own modern innovative technologies: big data, data visualization, 3D printers, artificial intelligence, virtual and mixed reality, etc.; know the role of science and education in public life; be able to draw reasoned conclusions; LO6: master the methods, technologies and tools for monitoring and analyzing the information space, including big data analysis methods, master qualitative methods of media

		communication research, study the basic principles of scientific research and scientific knowledge. LO7: possess skills in the field of information and cybersecurity; apply knowledge, understanding and ability to solve problems in new or unfamiliar situations in the contexts and within the wider (or interdisciplinary) areas related to the studied area; LO8: know at least one foreign language at a professional level, allowing for scientific research and practical activities; be able to work with foreign partners, exchange information and ideas, best practices, be able to work with new computer programs and applications;

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

№	Name of the PS	Profession card	Labor functions
1.	**Designer in Art Fields (Art Designer, Graphic Designer, Interior Designer, Industrial Designer, etc.)**	**Designer in Art Fields** (Art Designer, Graphic Designer, Interior Designer, Industrial Designer, etc.)	Engaged in scientific and pedagogical activities in the field of professional design education.
2.	**Development of Big Data Processing and Storage Systems**	Data Mining Specialist	Conducting analysis of large volumes of information.
3.	**Professional Standard: For Academic Staff (Faculty Members) of Higher and/or Postgraduate Education Institutions**	Lecturer, Senior Lecturer in the Field of Higher and Postgraduate Education	Teaching Conducting scientific and methodological work Interaction with stakeholders in higher and postgraduate education Socialization of students Conducting scientific research
		Lecturer, Teaching Assistant in the Field of Higher and Postgraduate Education	Conducting scientific and methodological work Carrying out scientific research Interaction with stakeholders in higher and postgraduate education Teaching

5. List of the EP competencies

BC1: Ability to perform systematic analysis and comprehensive understanding of interdisciplinary tasks at the intersection of media, information technologies, business, and data protection.
BC2: Proficiency in research methods and processing large heterogeneous data sets, including market trends and customer preferences.
BC3: Ability to extract and analyze data from various sources, including real-time information streams, to make informed business decisions.
BC4: Knowledge of research methodology in data science: setting objectives, data collection and processing, model building, and results visualization.

BC5: Mastery of basic machine learning methods, standards, and approaches to data transformation and standardization.

PC1: Ability to apply machine learning methods and statistical analysis to identify hidden patterns in large data sets.
PC2: Skills in developing and using models and algorithms to solve practical problems in information analytics and digital content protection.
PC3: Proficiency in organizing data storage and ensuring information security.
PC4: Ability to independently collect, analyze, and systematize scientific and technical information relevant to the research topic.

6. List of learning outcomes of the EP

LO1: master the technologies of creating virtual and augmented reality, computer graphics, 3D animation, master the methods of processing and analyzing images, new digital devices and digital media technologies for science and research.

LO2: To master the methods of information processing, including methods of big data analysis, to be able to use analytical data in the social field, to know the algorithm of network operation, types of information storage, problems of forming large arrays and their processing.

LO3: to study psychological and pedagogical strategies for the development of higher education, to master the psychological and social effects of the media, to form a scientific understanding of the theory and concepts of mass communication, to study the psychological and social effects of the media

LO4: to develop skills in working with scientific information, skills of logical, systematic and critical thinking, to know the history and philosophy of scientific information

LO5: own modern innovative technologies: big data, data visualization, 3D printers, artificial intelligence, virtual and mixed reality, etc.; know the role of science and education in public life; be able to draw reasoned conclusions;

LO6: master the methods, technologies and tools for monitoring and analyzing the information space, including big data analysis methods, master qualitative methods of media communication research, study the basic principles of scientific research and scientific knowledge.

LO7: possess skills in the field of information and cybersecurity; apply knowledge, understanding and ability to solve problems in new or unfamiliar situations in the contexts and within the wider (or interdisciplinary) areas related to the studied area;

LO8: know at least one foreign language at a professional level, allowing for scientific research and practical activities; be able to work with foreign partners, exchange information and ideas, best practices, be able to work with new computer programs and applications;

7. Matrix for correlating the learning outcomes of the EP with the formed competencies (V)

	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8
BC1		V	V		V			V
BC2	V			V	V	V		V
BC3			V	V		V	V	V
BC4	V						V	
BC5		V	V			V		
PC1								
PC2				V				

PC3	V				V		V	
PC4			V			V		

8. The relationship of LO with labor functions

№	LO	Labor functions
1.	LO1	Engaging in scientific and pedagogical activities in the field of professional design education.
2.	LO2	Conducting analysis of large data sets.
3.	LO3	Teaching Conducting scientific and methodological work Carrying out scientific research Interacting with stakeholders in higher and postgraduate education
4.	LO4 – LO7	Conducting analysis of large volumes of information.
5.	LO8	Engaging in scientific and pedagogical activities in the field of professional design education.

9. Table showing interconnection of competencies, learning outcomes, assessment methods and criteria

Competencies of the EP graduate	Competences expressed in expected learning outcomes	Evaluation criteria	Name of the estimation method
PC3, BC1	LO1	Knowledge of information and cybersecurity basics	Project
	LO7	Ability to solve interdisciplinary tasks.	Simulation
BC2, PC1	LO1	Proficiency in VR and AR technologies	Presentation
		Creation of computer graphics and 3D animation	Practical assignment
	LO3, LO8	Skills in working with foreign partners	Translation
		Ability to exchange information and experience.	Communication
BC1, BC5	LO7	Adaptability to new challenges in security.	Test
	LO4	Practical skills in information protection.	Testing
PC3	LO5	Ability to make well-argued conclusions.	Analytical essay
	LO6	Ability to apply big data analysis methods	Test
PC1, BC4	LO8	Skills in working with foreign partners.	Project

	LO3	Understanding theories and concepts of mass communication	Essay
PC4	LO6	Ability to apply acquired knowledge in practice.	Case study analysis
	LO2	Knowledge of power and political relations basics.	Group discussion

10. Information about the modules of the educational program

Module code and name	Volume (labor intensity) of the module	Learning outcomes	Learning outcomes assessment criteria	Disciplines forming the module Code and name
BASIC MODULES				
BM7401 Humanities and Pedagogical Module	20	LO2: To master the methods of information processing, including methods of big data analysis, to be able to use analytical data in the social field, to know the algorithm of network operation, types of information storage, problems of forming large arrays and their processing.	Understands principles of network operation and data storage.	Higher education: psychological and pedagogical development strategies
			Proficient in information processing tools.	History and philosophy of science
			Solves problems related to large data sets.	Foreign language (professional)
			Knows fundamentals of information and cybersecurity.	Teaching practice
PM7405 Module of professional IT competencies	20	LO7: possess skills in the field of information and cybersecurity; apply knowledge, understanding and ability to solve problems in new or unfamiliar situations in the contexts and within the wider (or interdisciplinary) areas related to the studied area;	Applies knowledge in new and non-standard situations.	Visual informatics: computer graphics and visualization
			Demonstrates adaptability in managing IT risks.	Big data: principles of data science
			Uses information protection methods in practice.	Artificial Intelligence: Applications for Media Strategy
			Able to exchange information, ideas, and experience.	Базы данных: Продвинутый
BM7400 Communication and Media Module	10	LO8: know at least one foreign language at a professional level, allowing for scientific research and practical activities; be able to work with foreign partners, exchange information and ideas, best practices, be able to work with new computer programs and applications;	Uses a foreign language in scientific and practical tasks.	Mass Communication Theory and Media Development Modeling
			Knowledge of psychological and pedagogical strategies in higher education.	Information Society, Telecommunications and Mass Media
BM7409 Information and Media Technologies Module	20	LO3: to study psychological and pedagogical strategies for the development of higher	Analyzes psychological and social effects of mass media.	Monitoring of the media market

		education, to master the psychological and social effects of the media, to form a scientific understanding of the theory and concepts of mass communication, to study the psychological and social effects of the media	Applies psycho-communication approaches in practice.	Digital media technologies
			Capable of critically evaluating media influence on society.	Psychology and communication
			Proficient in information processing tools.	Information Security and Information Protection
PROFESSIONAL MODULES				
PM7408 Module module of professional competencies in information and cyber security	10	LO1: master the technologies of creating virtual and augmented reality, computer graphics, 3D animation, master the methods of processing and analyzing images, new digital devices and digital media technologies for science and research.	Proficiency in VR and AR technologies.	State policy of the Republic of Kazakhstan in the field of information and cybersecurity
			Ability to create computer graphics and 3D animation.	The practice of computer animation and 3D modeling
PM7407 Module of professional design competencies	15	LO6: master the methods, technologies and tools for monitoring and analyzing the information space, including big data analysis methods, master qualitative methods of media communication research, study the basic principles of scientific research and scientific knowledge.	Mastery of media analysis methods and technologies.	Image Processing and Analysis
			Use of tools for monitoring the information environment.	Principles of Virtual and Mixed Reality
			Ability to analyze big data	Modern data journalism applications
PM7403 Module of professional analytical competencies	14	LO8: know at least one foreign language at a professional level, allowing for scientific research and practical activities; be able to work with foreign partners, exchange information and ideas, best practices, be able to work with new computer programs and applications; программами и приложениями.	Professional-level foreign language proficiency.	Data analysis
			Ability to conduct scientific research in a foreign language.	Scientific and qualitative methods of media communication research
			Capacity to exchange professional information and experience.	Big data and social analytics
PM7402 General professional competencies module	14	LO4: to develop skills in working with scientific information, skills of logical, systematic and critical thinking, to know the history and philosophy of scientific information	Skills in working with scientific information.	Organization and planning of scientific research
			Development of logical, systemic, and critical thinking.	Research practice

11. Information about the disciplines of the educational program

№	Discipline Code and Name	Brief description of the discipline (30-50 words)	Labor intensity of discipline in credits	Learning outcomes formed (codes)	Prerequisites	Postrequisites
Cycle of general education disciplines (GED) University component (UC) and (or) Elective component (EC)						
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.	6	LO5		Modern Educational Technologies
2.	**IFN 5201 Foreign language (professional)**	It is a one-semester practical course that tailors the English language program to the Master's students' professional/research needs. During the course the Master's students will work on an individual project and a research portfolio. By the end of the course, students will organize and present research portfolio.	5	LO2	Basic level, A1–A2 or B1	
3.	**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	LO8	Basic Knowledge in Philosophy	Course: "Ethics of Science"
Cycle of basic disciplines (BD) University component (UC)						
4.	**JUR7408 Information Security and Information Protection**	Problems of information security, storage and transportation; unauthorized access, hacking access, hacking; cybersecurity and measures to protect information resources; methods and tools for protecting data on the network; levels of protection and access to information; state secrets and protection of commercial information	5	LO7	Fundamentals of Computer Networks	Cryptography and Data Protection
5.	**JUR7403 Information Society, Telecommunications and Mass Media**	The development of telecommunications and modern trends in the development of the digital environment; media communication and personality needs; society and man, media consumption, technological and practical aspects of human information activities, machine data processing, artificial intelligence, modern gadgets and devices	5	LO5		Social Networks and Digital Culture
6.	**JUR742615 Monitoring of**	The purpose of the course is to acquaint students with the basic methods, technologies and tools for monitoring and analyzing the information space,	5	LO6	Introduction to	Media Project

	the media market	media measurements, to teach how to assess the degree of demand for the media market, to do analytics for comparing topics, group them by source type, and search within a topic. Perform contextual selections, complex queries, mention notes, categorize documents by headings, generate reports in the form of interactive graphs and tables, access messages, profiles and analytics via API, etc.			Media Analytics	Management
7.	**JUR7425 / JUR743115 Psychology and communication**	The aim of the course is targeted mastering different paradigms of thinking and creativity as conditions of socio-psychological and professional adaptation of a journalist in modern multimedia information environment. Study of modern approaches to the psychology of communications in international relations in an information and communication society; the process of evolution of thinking and styles of creativity journalist in connection with the development of technologies of mass communications.	5	LO3		Media Psychology
8.	**JUR7404 Mass Communication Theory and Media Development Modeling**	The purpose of the course is to form a systematic scientific understanding of the theoretical approaches and concepts of mass communication, its modern institutions and processes, as well as the trends of its development at the present stage. The course also examines the evolution of information exchange processes and the theoretical aspect of mass communication, modern trends in the development of digital media; from network technologies to virtual reality; new directions in the development of media; from mass media to mass communication	5	LO8	Introduction to Mass Communications	
9.	**JUR7401 Digital media technologies**	Big data and principles of work with them; telecommunications in the service of man; open resources and database access tools; search, filtering and cleaning of big data for applied purposes; data visualization: diagrams, infographics and interactive presentations; online data processing resources, big data development prospects	5	LO4	Fundamentals of Media Communications	Interactive Media and Interface Design
		Cycle of basic disciplines (BD) Elective component (EC)				
10.	**JUR 7410 Data analysis**	Software for creating and processing big data and user interfaces; applied aspects of computer programs and work with big data; problems of formation, storage and access to massive data; information and data protection; big data services	4	LO1	Introduction to Statistics and Mathematics	
11.	**JUR7411 Big data and social analytics**	The aim of the course is to provide undergraduates with knowledge about massively parallel information processing solutions, including big data analysis techniques, analytical tools, markets for big data management solutions, theory and practice of big data in industries, use of analytical data in the social field	6	LO4	Fundamentals of Data Analysis	Social Networks and Digital Culture
12.	**JUR7407 Organization and planning of**	The purpose of mastering the discipline "Research Methodology" is the study of the basic principles of scientific	4	LO6	Foundations of Philosoph	

	scientific research	research and scientific knowledge, its place in a public organization, functions and features in modern conditions, in particular in application to computer science, and familiarization with the ways of writing main types of scientific research: scientific report at the seminar, conference, international conference, article in a scientific journal, international magazine, master's and doctoral dissertations.			y of Science	
13.	**JUR7471 Scientific and qualitative methods of media communication research**	The purpose of the discipline is to acquaint undergraduates with qualitative methods of media communication research and to form the skills of their practical application	4	LO7	Introducti on to Media Communi cations	
14.	**JUR7405 Image Processing and Analysis**	A systematic review of modern methods of image processing and analysis, assessment of their information content. The course allows you to study and master the principles of image processing algorithms, editing and visual analysis, building software systems and systems for intelligent processing of digital graphics	5	LO8		Multimedia Technologi es
		Cycle of major disciplines (PD) University component (UC)				
15.	**JUR7417 Databases: Advanced**	Network operation algorithm, types of information storage, problems of forming large arrays and their processing; cloud storage technology; information security and access to network resources; problems of efficient use of big data: applied aspect	5	LO2	Data Modeling	
16.	**JUR7409 Visual informatics: computer graphics and visualization**	The study of modern methods of creating computer graphics and the formation of skills for their application in the professional activities of a journalist. The study of the main directions of development of computer science in the field of computer graphics; the formation of knowledge about the features of storing graphic information; studying the features of modern software used to create computer graphics; the formation of skills in working with graphic libraries and in modern graphic packages and systems	5	LO8	Fundamen tals of Programm ing	Modeling and Animation
17.	**JUR7415 State policy of the Republic of Kazakhstan in the field of information and cybersecurity**	The aim of the course is in-depth training of undergraduates in the field of information security through the prism of the role of journalism in modern society; research of information protection problems, ethical aspects of this issue, including the protection of personal data; concepts such as hacking and attacking information resources, hacking, methods of protection against unauthorized access; protecting networks and devices from threats.	5	LO7	Introducti on to Public Administr ation	
18.	**JUR 7414 Artificial Intelligence: Applications for Media Strategy**	The purpose of the course is to study and the possibilities of scientific application of modern technologies, thanks to which computers can be "taught" to perform certain tasks by processing a large amount of data and	5	LO5	Data Analysis and Machine Learning	Big Data Analytics in Media

		identifying patterns in them; development of interfaces for interaction with machine intelligence; the use of artificial intelligence to develop media strategies to improve the information environment.				
19.	**JUR7412 The practice of computer animation and 3D modeling**	The priority of visual aids in the digital environment, new trends in video production, animation effects; modern animation and programs to create; 3D modeling, 3D printers, holograms and other lighting effects, laser shows, demonstrations - new trends in the development of technology and science	5	LO1	Introducti on to 3D Modeling	
20.	**JUR7413 Principles of Virtual and Mixed Reality**	Modern gadgets, glasses and helmets of virtual and augmented reality in the service of man; new digital devices for science and research; sensors and analyzers of medical data on human vital activity; modern engineering and design using auxiliary tools, robots and programs at home and at work	5	LO4	Animation and Modeling in VR/AR	
21.	**JUR 7418 Modern data journalism applications**	As a result of mastering the discipline, the undergraduate must be: able to analyze current trends in the development of scientific knowledge using mobile applications, to research and analyze content aimed at users of smartphones and tablets, to own the technology of data analysis using applications that allow selection and filtering. process information. The undergraduate will be able to integrate knowledge with science, innovation and start-up projects, cope with complexities and make judgments based on incomplete or limited information, taking into account ethical and social responsibility for the application of these judgments and knowledge	5	LO4		Advanced Data Analysis Methods
22.	**JUR7406 Big data: principles of data science**	The mathematical foundations of big data; network operation algorithm, types of information storage, problems of forming large arrays and their processing; cloud storage technology; information security and access to network resources; problems of efficient use of big data: applied aspect	5	LO7		Big Data Analytics

12. Curriculum of the educational program (Platonus)

№	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	Differentiated test(course	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	PM7407 Module of professional design competencies	MD	UC	JUR7405	Image Processing and Analysis	5	2					150.0	45.0	15	30	0	15	90		5.0		
2		MD	EC	JUR7413	Principles of Virtual and Mixed Reality	5	3					150.0	45.0	15	30	0	15	90			5.0	
3				JUR 7418	Modern data journalism applications		3						45.0	15	30	0	15	90				
4	OOM7400 Communication and Media Module	BD	EC	(kv1)JUR7404	Mass Communication Theory and Media Development Modeling	5	2					150.0	45.0	15	30	0	15	90		5.0		
5				MTIS 7206	Information Society, Telecommunications and Mass Media		2						45.0	15	30	0	15	90				
6	PM7408 Module module of professional competencies in information and cyber security	MD	EC	JUR7415	State policy of the Republic of Kazakhstan in the field of information and cybersecurity	5	3					150.0	45.0	15	30	0	15	90			5.0	
7				ASM 7231	The practice of computer animation and 3D modeling		3						45.0	15	30	0	15	90				
8	PM7403 Module of professional	MD	UC	JUR7410	Data analysis	4	1					120.0	45.0	15	30	0	15	60	4.0			

9	analytical competencies	MD	UC	JUR7471	Scientific and qualitative methods of media communication research	4	2					120.0	45.0	15	30	0	15	60		4.0		
10		MD	UC	JUR7411	Big data and social analytics	6	3					180.0	60.0	30	30	0	15	105			6.0	
11	BM7409 Information and Media Technologies Module	BD	EC	JUR7426	Monitoring of the media market	5	1					150.0	45.0	15	30	0	15	90	5.0			
12				JUR7401	Digital media technologies		1						45.0	15	30	0	15	90				
13		BD	EC	JUR7425	Psychology and communication	5	1					150.0	45.0	15	30	0	15	90	5.0			
14				JUR7408	Information Security and Information Protection		1						45.0	15	30	0	15	90				
15	PM7405 Module of professional IT competencies	MD	EC	JUR7409	Visual informatics: computer graphics and visualization	5	3					150.0	45.0	15	30	0	15	90			5.0	
16				JUR7406	Big data: principles of data science		3						45.0	15	30	0	15	90				
17		MD	EC	JUR 7414	Artificial Intelligence: Applications for Media Strategy	5	3					150.0	45.0	15	30	0	15	90			5.0	
18				JUR7417	Databases: Advanced		3						45.0	15	30	0	15	90				
19	BM7401 Humanities and Pedagogical Module	BD	UC	SPS7007	Higher education: psychological and pedagogical development strategies	6	1					180.0	60.0	30	30	0	15	105	6.0			
20		BD	UC	SPS7001	History and philosophy of science	5	1					150.0	45.0	30	15	0	15	90	5.0			
21		BD	UC	LAN 7001A	Foreign language (professional)	5	1					150.0	45.0	0	45	0	15	90	5.0			
22		BD	UC	PP 7004	Teaching practice	4				120		120.0		0	0	0	0	0		4.0		
23	PM7402 General professional	MD	UC	JUR7407	Organization and planning of scientific research	4	1					120.0	45.0	15	30	0	15	60	4.0			

24	competencies module	MD	UC	RP7401	Research practice	6				180		180.0		0	0	0	0	0		6.0		
25		MD	UC	RP7402	Research practice	4				120		120.0		0	0	0	0	0				4.0
26	Scientific research work	RW	RC	RW 7001	The research work of master	2				60		60.0		0	0	0	0	0		2.0		
27		RW	RC	RW 7002	The research work of master	4				120		120.0		0	0	0	0	0			4.0	
28		RW	RC	RW 7003	The research work of master	18				540		540.0		0	0	0	0	0				18.0
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**	**0**
	Required component (GED/RC)					0		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	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**	**26**	**9**	**0**	**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	16	4	0	0
	Elective component (BD/EC)					15		0	0	0	0	450	135	45	90	0	45	270	10	5	0	0
3	**Major disciplines (MD)**					**53**		**0**	**0**	**300**	**0**	**1590**	**420**	**150**	**270**	**0**	**135**	**735**	**8**	**15**	**26**	**4**
	Required component (MD/RC)					0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	University component (MD/UC)					33		0	0	300	0	990	240	90	150	0	75	375	8	15	6	4
	Elective component (MD/EC)					20		0	0	0	0	600	180	60	120	0	60	360	0	0	20	0
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	15	0	0	420	0	2640	705	255	450	0	225	1290	34.0	24.0	26.0	4.0
USRW/UERW/DSRW		24	0	0	0	720	0	720	0	0	0	0	0	0	0.0	2.0	4.0	18.0
AC	**Additional courses**								0									
FA	**Final attestation**	8						240.0										
	Preparation and defense of a master's thesis	**8**				**4**		**240**										
	Total	**120**				**1144**		**3600**	**705**	**255**	**450**	**0**	**225**	**1290**				