# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

# **RIVNEN STATE UNIVERSITY OF HUMANITIES**

#### EDUCATIONAL AND PROFESSIONAL PROGRAM

#### «COMPUTER SCIENCES AND INFORMATION TECHNOLOGIES»

Second (master's degree) level of higher education

in speciality <u>122 Computer sciences</u>

branch of knowledge 12 Information technology

Qualifications: a master's degree of computer sciences, specialist, is in industry of computer sciences. Teacher of computer sciences

> Chairman of academic council prot. Postolovskyi R.M. (protocol W dand "\_\_\_\_\_2018) Educational program is introduced with "\_\_\_\_\_2018

APPROVED BY ACADEMIC COUNCIL

Rektor RSHU prof. Postolovskyi R.M. (order № \_\_\_\_\_ dated "\_\_\_"\_\_\_ 2018 )

#### SHEET OF CONCORDANCE educationally is professional program

LEVEL OF HIGHER EDUCATION	Second (master's degree)
SPECIALTY	122 «Computer sciences»
BRANCH OF KNOWLEDGE	12 «Information technology»
QUALIFICATION	master's degree of computer sciences, specialist, is in
	industry of computer sciences. Teacher of computer
	sciences

#### **Program developer:**

- 1. Klimyuk Yu.E, Ph.D. (Candidate of Technical Sciences), associate professor
- 2. Bomba A.Ya., Ph.D. (Doctor of Technical Sciences), professor
- 3. Prisyazhnyuk I.M., Ph.D. (Candidate of Technical Sciences), associate professor

#### **INTRODUCED**

Department of informatics and applied mathematics Protocol № 1 dated «30» January 2018

Head of department \_\_\_\_\_ prof. A.Ya. Bomba

#### AGREED

by the academic council of faculty of mathematics and informatics Protocol № 2 dated «27» February 2018

Chairman of the academic council \_\_\_\_\_\_ associate professor. M.I. Shakhraychuk

# APPROVED

by the academic council of Rivne State Humanitarian University

Protocol Nº 4 dated «24» April 2018

Chairman of the academic council \_\_\_\_\_ prof. R.M. Postolovskyi

#### PREFACE

Educational professional master's program in specialty 122 «Computer sciences» was developed for the introduction as the Standard of higher education at the appropriate level of higher education by the project group of the Rivne State University of Humanities composed of:

#### Project team leader(educational program guarantor):

Klimyuk Y. E., Ph.D. (Candidate of Technical Sciences), associate professor of the department of informatics and applied mathematics;

#### **Project group members:**

Bomba A. J., Ph.D. (Doctor of Technical Sciences), professor, Head of the department of informatics and applied mathematics;

Prisyazhnyuk I. M., Ph.D. (Candidate of Technical Sciences), associate professor of the department of higher mathematics.

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# 1. Profile of educational program in specialty 122 "Computer Science"

	I – General information				
Full name of higher	Rivne State University of Humanities				
educational institution					
The degree of higher	a master's degree;				
education and the name	Master of Computer Science, specialist in Computer Science. Teacher				
of the qualification in the	of Computer Science				
language of the original					
The official name of the	Computer Science and Information Technology				
educational program					
Type of diploma and the	Master's degree. Unitary.				
volume of the	90 ECTS credits / 1 year 5 months				
educational program					
Availability of	Certificate of Accreditation (series UD № 18001457). Valid until				
accreditation	01.07.2023				
Cycle / Level	NQS Ukraine - 8 level, FQ-EHEA - second cycle, EQF-LLL - 7 level				
Prerequisites	First (Bachelor) level, EQL "Specialist"				
Language (s) of teaching	Ukrainian				
The duration of the	For the period of study (2018 - 2020 years)				
educational program					
Internet address of the	www.fmi-rshu.org.ua				
permanent description of					
the educational program					
2 – The purpose of the educational program					
Preparation of highly skilled specialists on speciality 122 "Computer sciences", able to apply the					
modern methods of mathe	modern methods of mathematical design in a technique with application of informative and				
Internet- of technologies, algorithmic principles in a design, planning, development and					
accompaniment of the informative systems and technologies; to carry out development,					
introduction and accompaniment of the intellectual systems of analysis and processing of data in the					
organizational, technical, natural and socio-economic systems: developments of technical decisions					
are on the basis of software products and vehicle platforms of leading firms: developments and					
exploitations of computer information technologies of treatment of information and management					
are in different industries of	are in different industries of activity				
3 - Characteristics of the educational program					
Subject area (branch of	- The object of studying the masters of the field of knowledge 12				
knowledge, specialty,	"Information Technologies" of specialty 122 "Computer Science"				
specialization (if any))	are				
	- modeling and forecasting of husiness processes at enterprises and				
	organizations.				
	- construction and research of mathematical models of natural				
	technical socio-economic systems and processes:				
	- design and development of information systems:				
	analysis of requirements for hydroge and issting (active and				
	hardware complexes of enterprise or information systems);				
<ul> <li>defining and ensuring the implementation of project specifica</li> </ul>					

_	defining and ensuring the implementation of project specifications
	and the architecture of business applications;
_	creation and commissioning of business applications;

-	definition	of	modifications,	optimization	and	development	of
	business a	ppli	cations;				
—	planning, 1	man	agement and co	ordination of v	ariou	is activities in	the
	field of cre	eatio	on and operation	of business ap	plicat	ions;	

	control the activities of the teams of programmers and carry out
	advisory activities.
	Objects and means of professional activity:
	- programs and software components of business applications;
	- languages and systems of business application programming;
	- tasks for modification, optimization and development of business
	Instruments for documenting describing analyzing and modeling
	information and communication processes in information systems:
	- tools for project management:
	- standards and methods of management of the organization
	accounting and reporting at enterprises:
	- standards and methods of information interaction of systems;
	– designing and developing information technologies in market
	infrastructure;
	- development of cloud-based web services, regional storage,
	regional offices for education, science and business;
	- development of algorithmic and software of distributed systems and
	parallel computing;
	- development of intelligent information systems that support
	monitoring and management of virtual infrastructures
	- monitoring and management of virtual infrastructures.
	<i>Learning objectives:</i> training of specialists capable to apply methometical bases electric principles in modeling designing
	developing and maintaining information systems and technologies: to
	carry out development, implementation and support of intelligent
	systems of analysis and data processing in organizational, technical,
	natural and social and economic systems.
	algorithms, technologies, processes and methods for receiving,
	representing, processing, analyzing, transmitting, storing data in
	information systems in order to systematize them and identify the
	necessary facts of information nature.
	Mathada mathada and tachnologies: mathamatical models, mathada
	and algorithms for solving theoretical and applied problems that arise
	during the development of information systems: modern technologies
	and programming platforms; methods of collecting, analyzing and
	consolidating distributed information; technologies and methods of
	designing, developing and ensuring the quality of components of
	information systems; methods of computer graphics and data
	visualization technology; technology knowledge engineering.
	Tools and Hardware: CASE-technology for modeling and designing
	information systems; distributed computing systems: computer
	networks; cloud technologies, database management systems,
	operating systems.
Orientation of the	Educational-professional
educational program	
The main focus of the	Professional education in specialty 122 "Computer Science".

education and spe Feature	educational program and specializationKey words: programming, problem-oriented systems, digital networks mathematical models, intellectual systems, neural networks.Features of the programThe educational program is developed taking into account the experience of training computer science specialists at leading domestic and foreign universities and training of scientific personnel from related specialties in the system of institutes of the National Academy of Sciences of Ukraine and national research universities, as well as 			
	<u>4 – Eligibil</u> The specialist is tr	<b>ity of graduates for employment and furthe</b> rained to work in the field of economy under the	<b>r training</b> ne DK 009: 201	0
Code		Name	NACE (Rev. 1.1)	ISIC (Rev. 4)
58	Publishing activit	es		58
58.19	Other types of pul	blishing activities	22.15	5819
			22.22*	5819
			72.40*	5819
58.2	Software publishi	ng		582
58.21	Publishing of computer games			5820*
				5820*
58.29	Publication of other software		72.21*	5820*
				5820*
61	Telecommunicatio	ons (telecommunication)		61
61.1	Activity in the field	ld of wire telecommunication		611
61.2	Activity in the field of wireless telecommunication612		612	
61.3	Activity in the field of satellite telecommunication613		613	
62	Computer program	nming, consultancy and related activities		62
62.01	Computer programming 72.21*		72.21*	6201
			72.22*	6201
			72.40*	6201
62.02	Advice on inform	atization	72.10	6202*
			72.22*	6202*
62.03	Activities in the n	nanagement of computer equipment	72.30*	6202*
62.09	Other activities in	the field of information technology and	30.02*	6209
	computer systems		72.22*	6209
			72.60	6209
63	Provision of infor	mation services		63

63.1	Processing of data related activities;	a, placement of information on web sites and web portals		631	
63.11	Processing data, p	72.30*	6311		
	related activities	72.40*	6311		
63.12	Web portals		72.40*	6312	
63.9	Provision of other	information services		639	
63.91	Activities of news	agencies	92.40*	6391	
71.2	Technical testing	and research		712	
72	Scientific research	n and development		72	
72.1	Research and expe and technical scie	erimental development in the field of natural nces		721	
72.11	Research and experimental development in the field of biotechnology73.10*7210*			7210*	
74.9	Other professional, scientific and technical activities, n. in. 749* and. in.			749*	
85.42	Higher Education80.30*8530*			8530*	
	A specialist is able to perform the specified professional work under DK 003: 2010				
Code	ide Name				
2131.1	Researcher-Consultant (Computing Systems)				
2131.2	Database administra	ator			
2131.2	Computer Commun	nications Analyst			
2131.2	Analyst for Operation	ons and Applications Software			
2132.1	Programmer (database)				
2132.2	Programmer is applied				
2132.2	System programmer				
25036	Technician-program	nmer			
25036.1	Information Technology Specialist				
25036.2	Computer graphics specialist (designer)				
25036.3	Specialist in software development and testing				
25036.4	Specialist in computer software development				
2310.2	Teacher of higher educational institution				
Further	r training	HPK - 9 level, FQ-EHEA - third cycle, EQF	LLL - 8 level.		
5 - Teaching and assessment					
Teachin	ig and learning	multimedia lectures interactive lectures pra	actical classes	laboratory	
		classes, self-study, individual classes, cons	sultations, pre-	paration of	
thesis.					
Assessn	Oral and written examinations, credits, defense of the practice repo			ctice report,	
		defense of the thesis, certification.			
T		6 – Software competencies			
Integra	i competence	Autility to solve complex specialized tasks a	und practical por	ng process	
		which involves the application of mathematical theories and methods			
		and characterized by complexity and uncertai	nty of the cond	ditions.	

General competences (CC)	<ol> <li>Ability to think, analyze and synthesize abstract.</li> <li>Ability to apply knowledge in practical situations.</li> <li>Ability to plan and manage sometimes.</li> <li>Knowledge and understanding of the subject area and understanding of professional activity.</li> <li>Ability to communicate in a foreign language.</li> <li>Skills in the use of information and communication technologies.</li> <li>The ability to conduct research at the appropriate level.</li> <li>Ability to search, process and analyze information from various sources.</li> <li>Ability to generate new ideas (creativity).</li> <li>Ability to work in a team.</li> <li>Skills of interpersonal interaction.</li> <li>Ability to communicate with representatives of other professional groups of different levels (with experts from other branches of knowledge / types of economic activity).</li> <li>Ability to design and manage projects.</li> <li>Ability to find out initiative and enterprise.</li> <li>Ability to assess and ensure the quality of work performed.</li> </ol>
Professional competence of the specialty (PC)	<ol> <li>Ability to solve applied tasks in the field of protected information and telecommunication technologies and systems. Ability to design information systems, including a formal description of their structure and conduct business process simulation</li> <li>Ability to design the architecture of the system, implementation, integration of information systems.</li> <li>Ability to automate designing on the basis of modern CAD / CAM / CAE systems and modern IT technologies.</li> <li>Ability to implement methods, algorithms, simulation technologies for studying the characteristics and behavior of complex objects in the process of designing information systems.</li> <li>Ability to design and develop operational models and carry out operational studies in the process of analysis and synthesis of information systems of various purposes.</li> <li>Ability to use modern computer technologies for system, functional, design and technological design of complex objects and systems.</li> <li>Develop methodological and normative documents, proposals and implement measures on the implementation of developed projects and programs.</li> <li>Ability to solve problems of scalability, support remote components and interaction of different software platforms in distributed corporate information systems enterprise level.</li> <li>The ability to detect previously unknown knowledge necessary for decision making in various areas of professional activity and store them in data warehouses.</li> <li>Ability to develop plans and programs for organizing innovation in the enterprise, assess innovation and technological risks in the implementation of new technologies, organize training and training of employees of units in the field of innovation activities and coordinate the work of personnel in the integrated solution of innovation problems.</li> </ol>

<ul> <li>intellectual property objects.</li> <li>12. Ability to organize work to improve the scientific and technical knowledge of workers; to organize the development of creative initiative, the implementation of the achievements of domestic and foreign science, technology, the use of best practices, ensuring the effective work of the unit, enterprises.</li> <li>13. Ability to provide knowledge of standards, methods and tools for managing the processes of the life cycle of information systems, products and services of information technology.</li> <li>14. Ability to publicly present their own and well-known scientific results of production and technological activities.</li> <li>15. Ability to use methods of mathematical and algorithmic modeling in solving theoretical and applied problems.</li> <li>16. Ability to pays the result of the conducted physical-mathematical and applied research in the form of concrete recommendations, formulated in terms of the subject area of the phenomenon studied.</li> <li>17. Ability to apply and develop fundamental and interdisciplinary knowledge, including modern methods of discrete mathematical and algorithmic modeling, substantiation and acceptance of managerial and technical solutions for successful solving of professional tasks.</li> <li>18. Ability to participate in the work of research seminars, conferences, symposiums, presentation of their own scientific achievements, preparation of scientific ant technical information, bring it to the problem-task form, analysis and synthesis of information.</li> <li>20. Ability to solve applied tasks in the field of protected information and technologica in the yorkes of the work of research seminary, conferences, symposiums, presentation of their own scientific achievements, which are the basis for original thinking and innovation, in particular in the context of research work, a critical understanding of problems in teaching and / or professional activities, and on the boundary between substative in</li></ul>
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2. Theoretical and practical bases of the methodology of system
analysis, CASE-technology for the design of information and
software systems, modern methods of mathematical and computer
modeling, data visualization
3 Methods and approaches for designing the architecture of
information systems programming languages and modern
technologies for the development of information systems CAD/
CAN (CAE the development of information systems, CAD)
CAM / CAE systems for automated design and modern II
technologies, methodologies for automated design of complex
objects and systems, basic methods for analyzing requirements
and software design.
4. Theoretical and practical bases of methodology and modeling
technology in the process of research, design and operation of
information systems, products, services of information

5	General methodological principles of construction of operating models, main stages and essence of operational research and their ability to apply them in the analysis and synthesis of information systems of various purposes and in the tasks of organizational and economic management.
6	Types of reporting of the subject area of informatization and automation, requirements for scientific publications and rhetoric, tools for designing and demonstration of scientific results
7	<ul> <li>Knowledge of architecture and standards of component models, communication tools and distributed computing, concepts of data warehouses, methods for their prompt processing</li> </ul>
8	Legal aspects of intellectual property protection; criminal liability for violation of intellectual property rights; systems for preventing and detecting academic plagiarism, means of ensuring information security and data integrity in accordance with the solvable problem
9	<ul> <li>Knowledge of new technologies, techniques and paradigms; achievements of domestic and foreign science; bases of production management and organization of innovative activity at the enterprise.</li> </ul>
1	<ol> <li>Ability to solve complex problems and problems requiring updating and integration of knowledge, often under conditions of incomplete / insufficient information and contradictory requirements, research and / or innovation activities.</li> </ol>
1	1. Skills to apply the principles of system analysis of objects and automation processes, the use of state and international standards in the field of information technology in the design and development of information systems, their architecture, information and software, the use of CASE tools during design and modeling of business- processes and software development of information systems.
1	2. Ability to apply CAD / CAM / CAE systems of automated designing and modern IT technologies, to model systems and processes, conditions and behavior of complex informatization objects in the process of designing information systems and technologies.
1	<ol> <li>Ability to develop operational models and carry out operational research in the process of analysis and synthesis of information systems of various purposes, possession of modern technologies for the automation of the design of complex objects and systems, products and services of information technology, modern paradigms and programming languages</li> </ol>
1	<ol> <li>Skills to solve the problem of scalability, support of remote components and interaction of different software platforms in distributed corporate information systems at the enterprise level, application of technology of work with data warehouses, their analytical processing and intelligent analysis to ensure the reliable operation of information systems.</li> </ol>
1	5. To develop plans and programs of organization of innovative activity at the enterprise; to evaluate innovative and technological risks when introducing new technologies; organize training and training of the employees of the units in the field of innovation activity and coordinate the work of the personnel in the complex decision of innovative problems.

	16. To provide protection and assessment of the value of objects of
	intellectual activity; to be responsible for academic plagiarism.
	17. To organize work on improving the scientific and technical
	knowledge of workers; to organize the development of a creative
	initiative, the implementation of the achievements of domestic
	and foreign science, technology, the use of excellence, which
	ensure the effective work of the unit, enterprise; select users to
	learn information systems.
	18. Skills of presentation of own and well-known scientific results of
	production and technological activities, preparation of scientific
	articles, scientific and technical reports, their application in the
	development and integration of systems, products and services of
	information technology.
	19. Ability to apply and develop fundamental and interdisciplinary
	knowledge to substantiate and make managerial and technical
	decisions for the successful resolution of professional tasks.
	20. Ability to use hardware and software information security and
	integrity of data in information systems, mathematical methods of
	substantiation and adoption of managerial and technical solutions
	information processing function
	111011111011 processing function.
	21. A clear and unamorguous statement of their own conclusions, as well as knowledge and explanations that justify them to
	specialists and non-specialists in particular to the persons who
	specialists and non-specialists, in particular to the persons who
	22 Use of foreign languages in professional activities
	23. Decision-making in complex and unpredictable conditions
	requiring new approaches and forecasting.
	24. Responsibility for the development of professional knowledge
	and practice, assessment of the strategic development of the team.
	25. Ability to further education, which is largely autonomous and
	independent.
8 – I	Resource support for program implementation
Staffing	Conducting lectures on educational disciplines by scientific and
	pedagogical workers of the corresponding specialty having a degree
	and / or academic rank and working at their main place of work is
	more than 50% of the number of hours determined by the curriculum.
Material and technical	Material and technical support meets the licensing requirements for
support	providing educational services in the field of higher education and is
	sufficient to ensure the quality of the educational process.
advestignal methodical	program for the training of specialists in speciality 122 Computer
support	science meets the licensing requirements and is sufficient to ensure the
support	quality of the educational process
	9 – Academic mobility
National credit mobility	On the basis of bilateral agreements between Rivne State University of
i tutional ci cuit mobility	Humanitaries and higher educational establishments and scientific
	institutions of Ukraine
International Credit	On the basis of bilateral agreements between Rivne State Humanities
Mobility	University and foreign educational institutions.
Training of foreign	Possible.
applicants for higher	
education	

# 2. Перелік компонент освітньо-професійної програми та їх логічна послідовність

# 2.1. Перелік компонент ОП

Код н/д	Компоненти освітньої програми	Кількість	Форма	
	(навчальні дисципліни, курсові проекти (роботи),	кредитів	підсумк.	
	практики, кваліфікаційна робота)		контролю	
1	2	3	4	
	Обов'язкові компоненти ОП			
OK 1	Педагогіка вищої школи	3	Екзамен	
ОК 2	Психологія вищої школи	3	Залік	
ОК 3	Сучасні методи наукових досліджень	3	Залік	
ОК 4	Іноземна мова у професійній діяльності	3	Екзамен	
ОК 5	Цивільна безпека	3	Екзамен	
ОК 6	Проблеми оптимізації та керування процесами і		Erzamen	
	системами	4	Екзамсн	
ОК 7	Моделі поширення знань	4	Екзамен	
OK 8	.NET-технології	3	Залік	
ОК 9	Сучасні тенденції об'єктно-орієнтованого	35	Erzoweu	
	програмування	5,5	Екзамен	
OK 10	Сучасні операційні системи	4	Залік	
OK 11	Системи керування проектами	3	Залік	
OK 12	Технології та методика створення дистанційних	3	Залік	
	освітніх курсів	5	Jank	
OK13	Виробнича практика	9	Залік	
ОК14	Асистентська практика	6	Залік	
ОК15	Переддипломна практика	3		
Загальний	й обсяг обов'язкових компонент:	57,5		
Вибіркові компоненти ОП				
BK 1	Комп'ютена алгебра	3	Залік	
ВК 2	Філософія і методологія науки / Соціальна філософія	3	Залік	
ВК 3	Додаткові розділи системного програмування	4	Екзамен	
BK 4	Адміністрування та проектування баз даних в SQL		Залік	
	Server	5,5		
ВК 5	Web-технології та оптимізація сайтів	6	Екзамен	
ВК б	Апаратно-програмна організація і модернізація			
	персональних комп'ютерів	4	Залік	
BK 7	Цифровий маркетинг	3	Залік	
BK 8	Основи тестування програмного забезпечення	4	Залік	
Загальни	й обсяг вибіркових компонент:	32,5		
ЗАГАЛЬН	НИЙ ОБСЯГ ОСВІТНЬОЇ ПРОГРАМИ	90		

# 2.2. Структурно-логічна схема ОП



# 3. Form of certification of applicants for higher education

Attestation of graduating students of the educational program of speciality 122 "Computer sciences" are conducted in form defence of diploma work or handing over of complex examination from a profession and completed by delivery of document of standard pattern about awarding to him of master's degree with the appropriation of qualification master's "Degree of computer sciences, specialist in industry of computer sciences. Teacher of computer sciences".

Attestation comes true openly and publicly.

Forms of attestation of	Attestation of graduates students of the educationally-
bread-winners of higher	professional program "Computer sciences and
education	information technologies" 122 "Computer sciences"
	come speciality true in a form:
	• public defence of diploma work;
	• qualificatory to examination on a profession.
<b>Requirements to</b>	Graduate work is the educational work of a higher
qualifying work and it	education student, which is carried out at the final stage
public defence	of obtaining a Master's degree in computer science, a
	specialist in computer science, a computer science
	teacher to determine the correspondence of general and
	specialist competences acquired by applicants of higher
	education. (learning outcomes).
<b>Requirements are to</b>	Qualifying examination on a profession is conducted in
attestation to	oral. Qualifying examination on a profession is
examination	conducted as complex verification of knowledge of
(examinations)	bread-winners of higher education of the professionally-
	oriented theoretical preparation after the tickets made in
	complete accordance with the program of state
	attestation. Table of contents of tickets qualificatory to
	examination on a profession embraces material of
	profile educational disciplines within the framework of
	their programs. The complete set of examination tickets
	becomes firmly established and signs the manager of
	department.

# 4. Матриця відповідності програмних компетентностей компонентам освітньої програми

	OK 1	OK 2	OK 3	OK 4	OK 5	0K 6	OK 7	OK 8	0K 9	OK 10	OK 11	OK 12	OK 13	OK 14	OK 15	BK 1	BK 2	BK 3	BK 4	BK 5	BK 6	BK 7	BK 8
3К 1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК З	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК б	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 10	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 12	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 13	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 14	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ЗК 15			•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•		•
ЗК 16			•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•		•
ЗК 17			•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 2				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 3				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 4				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 5				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 6				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 7				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 8				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 10	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•
ФК 11	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 12	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 13			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 15	•			•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 16	•			•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 17	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 18	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 19	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ФК 20	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

• компетентність, яка набувається;

ОК<sub>ј –</sub> обов'язкова компонента;

ВК<sub>j</sub> – вибіркова компонента;

ЗК<sub>і</sub> – номер компетентності в списку загальних компетентностей профілю програми;

ФКі – номер компетентності в списку фахових компетентностей профілю програми.

# 5. Матриця забезпечення програмних результатів навчання (ПРН) відповідними компонентами освітньої програми

	К 1	K 2	К 3	K 4	K 5	9 Y	К 7	K 8	К 9	K 10	( 11	K 12	( 13	K 14	K 15	K 1	K 2	К 3	K 4	K 5	6 6	К 7	K 8
	Õ	Õ	Õ	Õ	Õ	Õ	Õ	Õ	Õ	ĺŌ	ÍŌ	Ó	10	10	10	B	B	B	B	B	B	B	B
ПРН 1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 3			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 4			•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 5			•	•	•				•	•	•	•	•	•	•	•	•	•		•	•	•	
ПРН 6			•	•	•				•	•				•	•	•	•	•		•	•	•	
ПРН 7			•	•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 8	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 9			•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
ПРН 10			•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
ПРН 11			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
ПРН 12			•		•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•
ПРН 13			•		•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•		•
ПРН 14			•		•	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•
ПРН 15			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•		•	•	•
ПРН 16			•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 17			•	•		•	•	•		•				•	•	•	•	•	•	•	•	•	•
ПРН 18	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 19	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•
ПРН 20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 21	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 22	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 23	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 24	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 25	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

• програмний результат навчання, що набувається;

ОК<sub>ј</sub> – обов'язкова компонента;

ВК<sub>j</sub> – вибіркова компонента;

ПРН<sub>і</sub> – порядковий номер програмного результату навчання.

#### 6. The system of the internal quality assuarance in higher education

The system of providing quality of educational activity and higher education (the system of internal providing activity) by the higher educational establishment functions in Rivne State University of Humanities and it foresees the realization of such procedures and measures:

1) determination of principles and procedures of providing quality of higher education;

2) realization of monitoring and periodic revision of the educational programs;

3) an annual assessment of graduates scientific and pedagogical employees of higher educational establishment and regular promulgation of results of such assessments are on the official web site of the higher educational establishment, on informative stands and in any another way;

4) providing certification training of pedagogical, research and scientific and pedagogical employees;

5) providing presence of necessary resources for organization of educational process, including individual work of graduates on every educational program;

6) providing presence of the informative systems for effective educational process control;

7) providing publicity of information about the educational programs, degrees of higher education and qualification;

8) providing the effective system of prevention and exposure of academic plagiarism in scientific works of graduates educational establishments and employees;

9) other procedures and measures.

System of providing quality of educational activity and quality of higher education by higher educational establishment (system of the internal providing quality) can after presentation the Rivne State University of Humanities be assessed by the National agency in providing quality of higher education or independent establishments of assessment and providing quality of higher education accredited by it in the accordance with the system requirements providing qualities of higher education, wich are approved by the National agency in providing quality of higher education, and with the international standards and recommendations for providing quality of higher education.

Guarantor of the educational program, the project group leader

associate professor Klimyuk Yu.E.