

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE**

**RIVNE STATE UNIVERSITY OF HUMANITIES**

**EDUCATIONAL AND PROFESSIONAL PROGRAM**

**«COMPUTER SCIENCES AND INFORMATION TECHNOLOGY»**

Second (master's degree) **level of higher education**

**in speciality** 122 Computer sciences

**branch of knowledge** 12 Information technology

**Qualifications:** a master's degree of computer sciences, specialist in the field of computer sciences. Teacher of computer sciences

APPROVED BY ACADEMIC COUNCIL

Chairman of academic council

\_\_\_\_\_ prof. Postolovskyi R.M.

(protocol № 1 dated 31. 01. 2019 )

Educational program is introduced

with 01.09. 2019

Rektor RSHU

\_\_\_\_\_ prof. Postolovskyi R.M.

(order № \_\_\_\_\_ dated " \_\_\_\_ " \_\_\_\_\_ 2019 )

**Rivne, 2019**

**APPROVAL SHEET**  
**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 in the field 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 «29» January 2019

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

**AGREED**

by the academic council of faculty of mathematics and informatics  
Protocol № 1 dated «30» January 2019

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

**APPROVED**

by the academic council of Rivne State Humanitarian University  
Protocol № 1 dated «31» January 2019

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 team 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 team 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"

<b>1 – General information</b>	
<b>Full name of higher educational institution</b>	Rivne State University of Humanities
<b>The degree of higher education and the name of the qualification in the language of the original</b>	a master's degree; Master of Computer Science, specialist in Computer Science. Teacher of Computer Science
<b>The official name of the educational program</b>	Computer Science and Information Technology
<b>Type of diploma and the volume of the educational program</b>	Master's degree. Unitary. 90 ECTS credits / 1 year 5 months
<b>Availability of accreditation</b>	Certificate of Accreditation (series UD № 18001457). Valid until 01.07.2023
<b>Cycle / Level</b>	NQS Ukraine - 8 level, FQ-EHEA - second cycle, EQF-LLL - 7 level
<b>Prerequisites</b>	First (Bachelor) level, EQL "Specialist"
<b>Language (s) of teaching</b>	Ukrainian
<b>The duration of the educational program</b>	For the period of study (2018 - 2020 years)
<b>Internet address of the permanent description of the educational program</b>	<a href="http://www.fmi-rshu.org.ua">www.fmi-rshu.org.ua</a>
<b>2 – The purpose of the educational program</b>	
<p>Training of highly skilled specialists on speciality 122 "Computer sciences", able to apply the modern methods of mathematical design in a technique with application of informative and Internet 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 activity.</p>	
<b>3 - Characteristics of the educational program</b>	
<b>Subject area (branch of knowledge, specialty, specialization (if any))</b>	<p>– <i>The object of studying the masters of the field of knowledge 12 "Information Technologies" of specialty 122 "Computer Science" are:</i></p> <ul style="list-style-type: none"> <li>– modeling and forecasting of business processes at enterprises and organizations;</li> <li>– construction and research of mathematical models of natural, technical, socio-economic systems and processes;</li> <li>– design and development of information systems;</li> <li>– analysis of requirements for business applications (software and hardware complexes of enterprise or information systems);</li> <li>– defining and ensuring the implementation of project specifications and the architecture of business applications;</li> <li>– creation and commissioning of business applications;</li> <li>– definition of modifications, optimization and development of business applications;</li> <li>– planning, management and coordination of various activities in the field of creation and operation of business applications;</li> </ul>

	<p>control the activities of the teams of programmers and carry out advisory activities.</p> <p><i>Objects and means of professional activity:</i></p> <ul style="list-style-type: none"> <li>– programs and software components of business applications;</li> <li>– languages and systems of business application programming;</li> <li>– tasks for modification, optimization and development of business applications;</li> <li>– Instruments for documenting, describing, analyzing and modeling information and communication processes in information systems;</li> <li>– tools for project management;</li> <li>– standards and methods of management of the organization, accounting and reporting at enterprises;</li> <li>– standards and methods of information interaction of systems;</li> <li>– designing and developing information technologies in market infrastructure;</li> <li>– development of cloud-based web services, regional storage, regional offices for education, science and business;</li> <li>– development of algorithmic and software of distributed systems and parallel computing;</li> <li>– development of intelligent information systems that support decision-making;</li> <li>– monitoring and management of virtual infrastructures.</li> </ul> <p><i>Learning objectives:</i> training of specialists capable to apply mathematical bases, algorithmic 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.</p> <p><i>Theoretical content of the subject area:</i> modern models, methods, 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.</p> <p><i>Methods, methods and technologies:</i> mathematical models, methods 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.</p> <p><i>Tools and Hardware:</i> CASE-technology for modeling and designing information systems; distributed computing systems; computer networks; cloud technologies, database management systems, operating systems.</p>
<b>Orientation of the educational program</b>	Educational-professional
<b>The main focus of the</b>	Professional education in specialty 122 "Computer Science".

<b>educational program and specialization</b>	Key words: programming, problem-oriented systems, digital networks, mathematical models, intellectual systems, neural networks.
<b>Features of the program</b>	The 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 many years of experience in training specialists specializing in informatics.

#### **4 – Eligibility of graduates for employment and further training**

*The specialist is trained to work in the field of economy under the DK 009: 2010*

<b>Code</b>	<b>Name</b>	<b>NACE (Rev. 1.1)</b>	<b>ISIC (Rev. 4)</b>
58	Publishing activities		58
58.19	Other types of publishing activities	22.15	5819
		22.22*	5819
		72.40*	5819
58.2	Software publishing		582
58.21	Publishing of computer games	72.21*	5820*
		72.40*	5820*
58.29	Publication of other software	72.21*	5820*
		72.40*	5820*
61	Telecommunications (telecommunication)		61
61.1	Activity in the field of wire telecommunication		611
61.2	Activity in the field of wireless telecommunication		612
61.3	Activity in the field of satellite telecommunication		613
62	Computer programming, consultancy and related activities		62
62.01	Computer programming	72.21*	6201
		72.22*	6201
		72.40*	6201
62.02	Advice on informatization	72.10	6202*
		72.22*	6202*
62.03	Activities in the management of computer equipment	72.30*	6202*
62.09	Other activities in the field of information technology and computer systems	30.02*	6209
		72.22*	6209
		72.60	6209
63	Provision of information services		63

63.1	Processing of data, placement of information on web sites and related activities; web portals		631
63.11	Processing data, placing information on the Web sites and related activities	72.30*	6311
		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 and development		72
72.1	Research and experimental development in the field of natural and technical sciences		721
72.11	Research and experimental development in the field of biotechnology	73.10*	7210*
74.9	Other professional, scientific and technical activities, n. in. and. in.		749*
85.42	Higher Education	80.30*	8530*
<i>A specialist is able to perform the specified professional work under DK 003: 2010</i>			
<b>Code</b>	<b>Name</b>		
2131.1	Researcher-Consultant (Computing Systems)		
2131.2	Database administrator		
2131.2	Computer Communications Analyst		
2131.2	Analyst for Operations and Applications Software		
2132.1	Researcher-Consultant (Programming)		
2132.2	Programmer (database)		
2132.2	Programmer is applied		
2132.2	System programmer		
25036	Technician-programmer		
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		
<b>Further training</b>	HPK - 9 level, FQ-EHEA - third cycle, EQF LLL - 8 level.		
<b>5 - Teaching and assessment</b>			
<b>Teaching and learning</b>	Teaching and learning is carried out in the form of: lectures, multimedia lectures, interactive lectures, practical classes, laboratory classes, self-study, individual classes, consultations, preparation of thesis.		
<b>Assessment</b>	Oral and written examinations, credits, defense of the practice report, defense of the thesis, certification.		
<b>6 – Software competencies</b>			
<b>Integral competence</b>	Ability to solve complex specialized tasks and practical problems in various subject areas of professional activity or in the learning process, which involves the application of mathematical theories and methods and characterized by complexity and uncertainty of the conditions.		

<p><b>General competences (CC)</b></p>	<ol style="list-style-type: none"> <li>1. Ability to think, analyze and synthesize abstract.</li> <li>2. Ability to apply knowledge in practical situations.</li> <li>3. Ability to plan and manage sometimes.</li> <li>4. Knowledge and understanding of the subject area and understanding of professional activity.</li> <li>5. Ability to communicate in a foreign language.</li> <li>6. Skills in the use of information and communication technologies.</li> <li>7. The ability to conduct research at the appropriate level.</li> <li>8. Ability to learn and master modern knowledge.</li> <li>9. Ability to search, process and analyze information from various sources.</li> <li>10. Ability to generate new ideas (creativity).</li> <li>11. Ability to make informed decisions.</li> <li>12. Ability to work in a team.</li> <li>13. Skills of interpersonal interaction.</li> <li>14. 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>15. Ability to design and manage projects.</li> <li>16. Ability to find out initiative and enterprise.</li> <li>17. Ability to assess and ensure the quality of work performed.</li> </ol>
<p><b>Professional competence of the specialty (PC)</b></p>	<ol style="list-style-type: none"> <li>1. 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>2. Ability to design the architecture of the system, implementation, integration of information systems.</li> <li>3. Ability to automate designing on the basis of modern CAD / CAM / CAE systems and modern IT technologies.</li> <li>4. 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>5. 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>6. Ability to use modern computer technologies for system, functional, design and technological design of complex objects and systems.</li> <li>7. Develop methodological and normative documents, proposals and implement measures on the implementation of developed projects and programs.</li> <li>8. Ability to solve problems of scalability, support remote components and interaction of different software platforms in distributed corporate information systems enterprise level.</li> <li>9. 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>10. 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>



	<ol style="list-style-type: none"> <li>11. Ability to provide protection and assessment of the value of 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 pass 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 mathematics, probabilistic-statistical methods, mathematical methods of operations research, artificial intelligence, 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 articles, scientific and technical reports.</li> <li>19. Ability to process general scientific and 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 telecommunication technologies and systems.</li> </ol>
<b>7 – Program learning outcomes</b>	
	<ol style="list-style-type: none"> <li>1. Specialized conceptual knowledge gained in the process of learning and / or professional activity at the level of the latest 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 substantive industries.</li> <li>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.</li> <li>3. Methods and approaches for designing the architecture of information systems, programming languages and modern technologies for the development of information systems, CAD / CAM / CAE systems for automated design and modern IT technologies, methodologies for automated design of complex objects and systems, basic methods for analyzing requirements and software design.</li> <li>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 technologies, other objects of professional activity.</li> </ol>

	<ol style="list-style-type: none"><li>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.</li><li>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.</li><li>7. Knowledge of architecture and standards of component models, communication tools and distributed computing, concepts of data warehouses, methods for their prompt processing.</li><li>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</li><li>9. 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><li>10. 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><li>11. 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.</li><li>12. 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.</li><li>13. 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><li>14. 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><li>15. 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.</li></ol>
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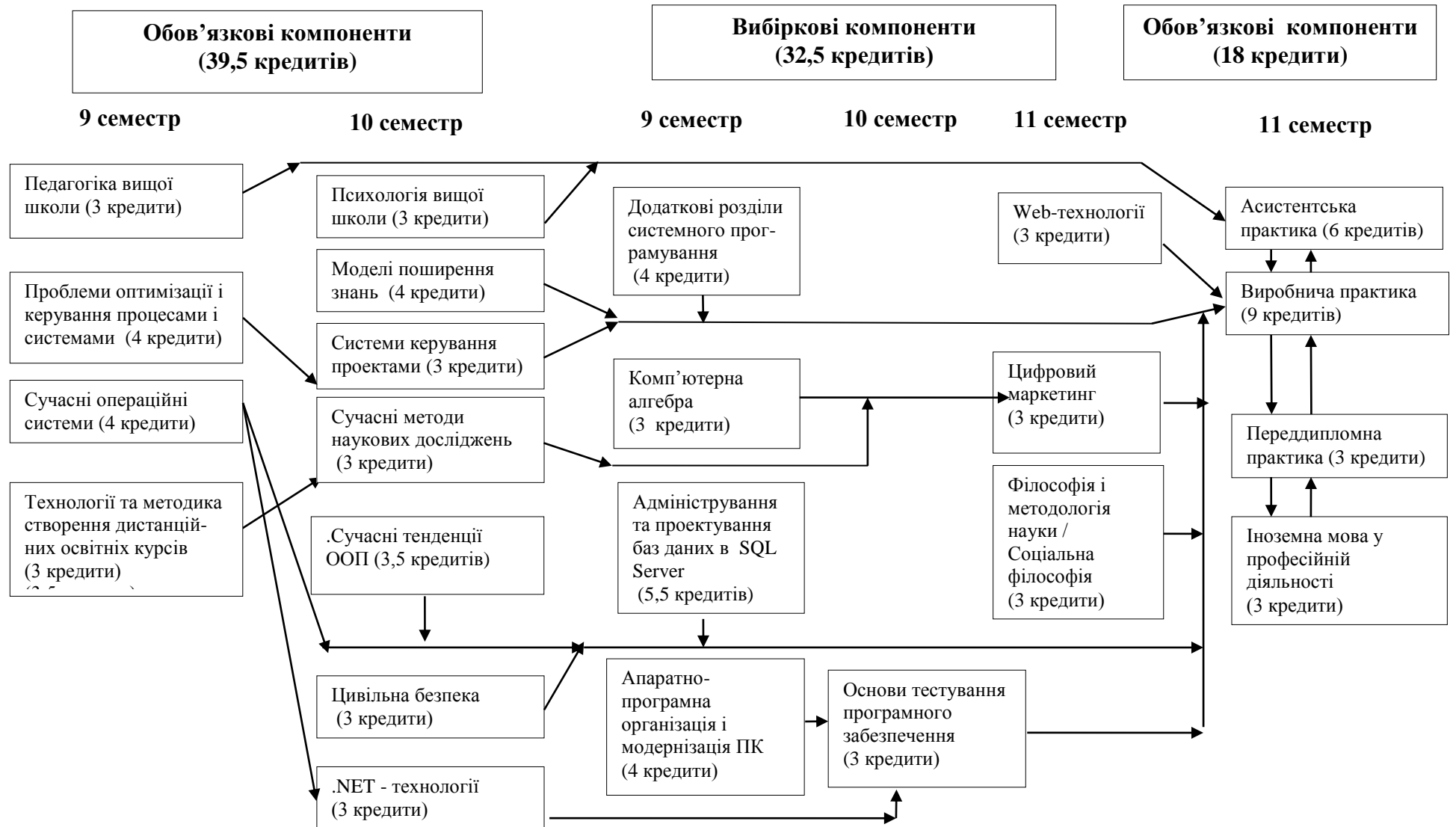
	<p>16. To provide protection and assessment of the value of objects of intellectual activity; to be responsible for academic plagiarism.</p> <p>17. To organize work on improving the scientific and technical knowledge of workers; to organize the development of a creative initiative, the implementation 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.</p> <p>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.</p> <p>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.</p> <p>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 that are adequate to the conditions in which the objects of information processing function.</p> <p>21. A clear and unambiguous 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 study.</p> <p>22. Use of foreign languages in professional activities.</p> <p>23. Decision-making in complex and unpredictable conditions requiring new approaches and forecasting.</p> <p>24. Responsibility for the development of professional knowledge and practice, assessment of the strategic development of the team.</p> <p>25. Ability to further education, which is largely autonomous and independent.</p>
<b>8 – Resource support for program implementation</b>	
<b>Staffing</b>	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..
<b>Material and technical support</b>	Material and technical support meets the licensing requirements for providing educational services in the field of higher education and is sufficient to ensure the quality of the educational process..
<b>Information and educational-methodical support</b>	Informational and teaching-methodological support of the educational program for the training of specialists in specialty 122 Computer science meets the licensing requirements and is sufficient to ensure the quality of the educational process.
<b>9 – Academic mobility</b>	
<b>National credit mobility</b>	On the basis of bilateral agreements between Rivne State University of Humanities and higher educational establishments and scientific institutions of Ukraine..
<b>International Credit Mobility</b>	On the basis of bilateral agreements between Rivne State Humanities University and foreign educational institutions.
<b>Training of foreign applicants for higher education</b>	Possible.

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

### 2.1. Перелік компонент ОП

Код н/д	Компоненти освітньої програми (навчальні дисципліни, курсові проекти (роботи), практики, кваліфікаційна робота)	Кількість кредитів	Форма підсумк. контролю
1	2	3	4
<b>Обов'язкові компоненти ОП</b>			
ОК 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 системами	4	Екзамен
ОК 7	Моделі поширення знань	4	Екзамен
ОК 8	.NET-технології	3	Залік
ОК 9	Сучасні тенденції об'єктно-орієнтованого програмування	3,5	Екзамен
ОК 10	Сучасні операційні системи	4	Залік
ОК 11	Системи керування проектами	3	Залік
ОК 12	Технології та методика створення дистанційних освітніх курсів	3	Залік
ОК13	Виробнича практика	9	Залік
ОК14	Асистентська практика	6	Залік
ОК15	Переддипломна практика	3	
<b>Загальний обсяг обов'язкових компонент:</b>		<b>57,5</b>	
<b>Вибіркові компоненти ОП</b>			
ВК 1	Комп'ютерна алгебра	3	Залік
ВК 2	Філософія і методологія науки / Соціальна філософія	3	Залік
ВК 3	Додаткові розділи системного програмування	4	Екзамен
ВК 4	Адміністрування та проектування баз даних в SQL Server	5,5	Залік
ВК 5	Web-технології та оптимізація сайтів	6	Екзамен
ВК 6	Апаратно-програмна організація і модернізація персональних комп'ютерів	4	Залік
ВК 7	Цифровий маркетинг	3	Залік
ВК 8	Основи тестування програмного забезпечення	4	Залік
<b>Загальний обсяг вибірових компонент:</b>		<b>32,5</b>	
<b>ЗАГАЛЬНИЙ ОБСЯГ ОСВІТНЬОЇ ПРОГРАМИ</b>		<b>90</b>	

## 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" is carried out in form of defense of diploma work or taking complex examination from a profession and completed by delivery of document of standard pattern about awarding him master's degree with the appropriation of qualification master's "Degree of computer sciences, specialist in the field of computer sciences. Teacher of computer sciences".

Attestation is carried out openly and publicly.

<b>Forms of attestation of graduates of higher education</b>	Attestation of graduates students of the educational and professional program "Computer sciences and information technologies" 122 "Computer sciences" is carried out in a form: <ul style="list-style-type: none"><li>• public defense of diploma work;</li><li>• qualification examination on a profession.</li></ul>
<b>Requirements to qualification work and its public defense</b>	Graduate work is the educational work of a higher education student, which is carried out at the final stage 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 to attestation examination (examinations)</b>	Qualification examination on a profession is carried out oral form. Qualification examination on a profession is carried out complex verification of knowledge of graduates of higher education of the professionally-oriented theoretical preparation after the examination tickets made in complete accordance with the program of state attestation. The contents of examination tickets for qualification examination on a profession embraces material of profile educational disciplines within the framework of their programs. The complete set of examination tickets is approved and signed by the head of department.

#### 4. Матриця відповідності програмних компетентностей компонентам освітньої програми

	ОК 1	ОК 2	ОК 3	ОК 4	ОК 5	ОК 6	ОК 7	ОК 8	ОК 9	ОК 10	ОК 11	ОК 12	ОК 13	ОК 14	ОК 15	ВК 1	ВК 2	ВК 3	ВК 4	ВК 5	ВК 6	ВК 7	ВК 8	
ЗК 1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ЗК 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ЗК 3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ЗК 4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ЗК 5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ЗК 6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
ЗК 7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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ЗК 9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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- компетентність, яка набувається;
- ОК<sub>j</sub> – обов’язкова компонента;
- ВК<sub>j</sub> – вибіркова компонента;
- ЗК<sub>i</sub> – номер компетентності в списку загальних компетентностей профілю програми;
- ФК<sub>i</sub> – номер компетентності в списку фахових компетентностей профілю програми.

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

	ОК 1	ОК 2	ОК 3	ОК 4	ОК 5	ОК 6	ОК 7	ОК 8	ОК 9	ОК 10	ОК 11	ОК 12	ОК 13	ОК 14	ОК 15	ВК 1	ВК 2	ВК 3	ВК 4	ВК 5	ВК 6	ВК 7	ВК 8
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			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
ПРН 16			•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 17			•	•		•	•	•		•				•	•	•	•	•	•	•	•	•	•
ПРН 18	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 19	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 21	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 22	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 23	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 24	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ПРН 25	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

- програмний результат навчання, що набувається;
- ОК<sub>j</sub> – обов’язкова компонента;
- ВК<sub>j</sub> – вибіркова компонента;
- ПРН<sub>i</sub> – порядковий номер програмного результату навчання.



## **6. The system of the internal quality assurance 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 a 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 other way;
- 4) providing certification training of pedagogical, research and scientific and pedagogical employees;
- 5) providing availability of necessary resources for the organization of educational process, including individual work of graduates on every educational program;
- 6) providing availability of 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 preventing and revealing academic plagiarism in scientific works of higher educational establishments employees and their graduates;
- 9) other procedures and measures.

The 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, which 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.