

**MINISTRY OF DEFENSE OF UKRAINE**  
**NATIONAL DEFENCE UNIVERSITY OF UKRAINE**

---



**EDUCATIONAL AND SCIENTIFIC  
PROGRAM**

**“Supply of troops (forces)”**

**the third (educational and scientific) degree  
of higher education**

<b>Specialty</b>	254 Supply of troops (forces)
<b>Area of expertise</b>	25 Military sciences, national security, state border security

**Kyiv 2024**

**LETTER OF APPROVAL  
OF THE EDUCATIONAL AND SCIENTIFIC PROGRAM  
“Support of troops (forces)”**

**Level of higher education** third (educational and scientific)  
**Degree of higher education** Doctor of Philosophy  
**by specialty** 254 Supply of troops (forces)  
**area of expertise** 25 Military sciences, national security, state border security

Ministry of Defense of Ukraine

APPROVED BY  
Director of the Department of Military Education  
and Science of the Ministry of Defense of Ukraine

Volodymyr MIRNENKO

“ \_\_\_\_\_ ” \_\_\_\_\_ 2024.

**Developed and introduced**

**Head of development**

Professor of the Department of Geospatial  
Support and Application of Space  
Systems of the National Defense  
University of Ukraine  
colonel

Mikhail RAKUSHEV

“ \_\_\_\_\_ ” \_\_\_\_\_ 2024.

## INTRODUCTION

The educational and scientific program “Provision of Troops (Forces)” of the third (educational and scientific) level of higher education for the preparation of Doctors of Philosophy in the field of knowledge “Military Sciences, National Security, State Border Security” in the specialty “Provision of Troops (Forces)” is developed in accordance with the requirements of the Law of Ukraine “On Higher Education” (as amended), resolutions of the Cabinet of Ministers of Ukraine of 23.03.2016 № 261 “Procedure for the training of applicants for the degree of Doctor of Philosophy and Doctor of Science in higher education institutions (research institutions)” (as amended) and from 23.11.2011 No. 1341 “On Approval of the National Qualifications Framework” (as amended by the resolutions of the Cabinet of Ministers of Ukraine of 12.06.2019 No. 509 and 25.06.2020 No. 519) and the order of the Ministry of Defense of Ukraine of 15.02.2019 No. 65 “On the Distribution of the Main Areas of Scientific Research between Scientific Institutions, Higher Military Educational Institutions, Military Educational Units of Higher Educational Institutions of the Ministry of Defense of Ukraine and the Armed Forces of Ukraine”.

The educational and scientific program “Support of Troops (Forces)” was developed taking into account the recommendations and recognized scientific practices of scientific education in the European Education Area, in particular: Salzburg Principles (Salzburg I Conclusion and Recommendation from the Bologna Seminar on “Doctoral Programs for the European Knowledge Society”, 2005 & Salzburg II Initiative Recommendations of the European University Association”, 2010).

Developed by a working group consisting of:

Laureate of the Borys Paton National Prize of Ukraine, Doctor of Technical Sciences, Senior Researcher RAKUSHEV Mykhailo Yuriiovych,  
 Doctor of Economics, Associate Professor Mykola TKACH,  
 Doctor of Technical Sciences, Professor KURTSEITOV Tymur Lenurovych,  
 Candidate of Military Sciences, Associate Professor Mykola PIDHORODETSKYI.

Stakeholders involved:

Deputy Head of the University for Scientific Work of the National Defense University of Ukraine, Candidate of Military Sciences, Professor, Pavlo SHYPANSKYI,

Doctor of Historical Sciences, Professor Ihor FURMAN;

Yurii MATVIICHUK, Associate Professor (full-time) of the National Defense University of Ukraine.

Reviews and feedback from external stakeholders:

Director of the Department of Military Education and Science of the Ministry of Defense of Ukraine, Honored Worker of Education of Ukraine, Doctor of Technical Sciences, Professor MIRNENKO Volodymyr;

Deputy Chief of Staff of the Support Forces Command of the Armed Forces of Ukraine, Honored Inventor of Ukraine, Doctor of Technical Sciences, Professor, Colonel Volodymyr Kotsiuruba

Deputy Chief of the State Research Institute of Aviation, Doctor of Technical Sciences, Associate Professor, Colonel Oleksii KONONOV.

# 1. PROFILE OF THE EDUCATIONAL AND SCIENTIFIC PROGRAM

“Supply of troops (forces)”

in the specialty 254 Supply of troops (forces)

<b>1 – General information</b>	
<b>Full name of the higher education institution and subdivision</b>	The National Defence University of Ukraine , Institute of Logistics and Support of Troops (Forces).
<b>Higher education degree and qualification</b>	Philosophy Doctor, Philosophy Doctor of Military Management by Branches of the Armed Forces in the Sector of Military Sciences, National Security, State Border Security in the specialty Military and defence
<b>The official name of the educational program</b>	Supply of troops (forces)
<b>Diploma Type for the educational program scope</b>	Diploma of Doctor of Philosophy in the field of knowledge “Military Sciences, National Security, State Border Security” in the specialty “Support of Troops (Forces)”, single, the volume of the educational component is 46 ECTS credits. The term of study is 4 years.
<b>Accreditation availability</b>	Certificate of accreditation of NAAQA dated 29.07.2021 No. 2021 (valid until 01.07.2027)
<b>Cycle/degree</b>	NQF of Ukraine - 3rd cycle / 8th level, QF-EHEA - third cycle, EQF-LLL- level 8
<b>Preconditions</b>	Availability of the second (master's) level of higher education. Admission conditions are determined by the “Rules of Admission to the National Defense University of Ukraine” approved by the Academic Council of the University
<b>Language(s) of instruction</b>	Ukrainian and English
<b>The duration of the educational program</b>	4 years
<b>Internet address of permanent program placement</b>	<a href="https://nuou.org.ua/">https://nuou.org.ua/</a>
<b>2 – The purpose of the educational program</b>	
Ensure the training of highly qualified scientific and scientific-pedagogical personnel capable of solving significant problems and independently conducting innovative scientific and technical research, the results of which have theoretical and practical significance in the field of supplying troops (forces).	

<b>3 – Characteristics of the program</b>	
<b>Subject area (area of knowledge, specialty, specialization ( if any))</b>	<p><i>The object</i> of study is advanced achievements and current problems in the field of troop (force) support.</p> <p><i>Learning objectives:</i> acquiring the ability to solve significant problems in the field of troops (forces) support, expanding and reassessing existing knowledge and professional practice, initiating, planning, implementing and adjusting a consistent process of thorough scientific research in compliance with proper academic integrity, critical analysis, evaluation and synthesis of new and complex ideas.</p> <p><i>Theoretical content</i> of the subject area - the basic laws, regularities, categories, concepts, principles and methods related to theoretical and experimental research in the field of troops (forces) support.</p> <p><i>Methods, techniques and technologies</i> of scientific cognition: theoretical, general logical, empirical methods of scientific knowledge, analysis, synthesis, methods of mathematical modeling, information systems and technologies related to theoretical and experimental research in the field of troops (forces) support.</p>
<b>Educational program orientation</b>	Educational and scientific (Doctor of Philosophy), academic.
<b>The main educational program focus and specialization focus</b>	<p>Scientific research in the field of supplying troops (forces). The educational and research program is aimed at training highly qualified scientific and scientific-pedagogical personnel capable of solving current problems and independently conducting innovative scientific and scientific-technical research, the results of which have theoretical and practical significance in the field of troop (force) support.</p> <p>Keywords: armed forces, supply of troops (forces), types of supply of troops (forces), support forces, military economy, rear of the armed forces, logistics support of military formations, history of military art, moral and psychological support.</p>
<b>Program peculiarities</b>	<p>The program is focused on an integrated approach to training specialists in all types of support for troops (forces) without exception and allows you to form an individual educational trajectory.</p> <p>The scientific component of the educational and scientific program is determined by the individual plan of the applicant's scientific work.</p>
<b>4 – Graduates applicability for further employment and education</b>	
<b>Graduates</b>	Scientific and scientific-pedagogical positions in higher

<b>applicability</b>	military educational institutions, military units of higher education institutions, scientific institutions and military authorities.
<b>Further education</b>	Doctoral degree, advanced training at leading universities and research institutions.
<b>5 – Teaching and evaluation</b>	
<b>Teaching and studying</b>	Problem-based learning with the acquisition of competencies necessary to solve current complex problems in the field of supplying troops (forces). Mastering the methodology of scientific and pedagogical work in higher education. The main types of classes are lectures, seminars, consultations, and independent work.
<b>Evaluation</b>	Current control (surveys, individual tasks for the preparation of parts of the dissertation research). Final control (exams, differentiated tests). Public defense of scientific achievements in the form of a dissertation.
<b>6 – Program competencies</b>	
<b>Integral competence</b>	Ability to solve complex problems in the field of military sciences, national security, state border security and/or research and innovation activities in the field of troops (forces) support and to generate new ideas in the course of professional activities that involve rethinking existing and creating new knowledge.
<b>General competencies</b>	GC1. Ability to identify, formulate and solve problems. GC2. Formation of a systematic scientific outlook, professional ethics and general cultural outlook. GC3. Ability to conduct research at the appropriate level. GC4. Ability to communicate in a foreign language. GC5. Skills in the use of information and communication technologies.
<b>Special (professional, subject-orientated) competencies</b>	SC1. Ability to conduct research on the state of existing systems of support of troops (forces) of the Armed Forces of Ukraine and advanced countries of the world, ways to achieve compatibility with the armed forces of NATO countries at a high professional level. SC2. Ability to work with experts, gain knowledge from them and use it in practice, publicly present and defend own scientific results, speak at national and international forums, conferences and seminars. SC3. Ability to develop and improve theoretical and experimental methods for determining the feasibility of using new physical principles, technical solutions and technological processes in the creation of promising and improvement of existing systems of support of troops

	<p>(forces).</p> <p>SC4. Ability to conduct research on opportunities and ways to improve existing and create new elements and components of the system of supplying troops (forces) of the Armed Forces of Ukraine.</p> <p>SC5. Ability to substantiate requirements for types of support for troops (forces) and use them in planning the development and design of new systems.</p> <p>SC6. Ability to carry out scientific and pedagogical, scientific and innovative activities in higher military educational institutions, acquisition of pedagogical skills, pedagogical techniques, professional skills of future scientists, teachers of higher military school.</p> <p>SC7. Ability to create models of troop (force) support processes using physical, mathematical models and computer technologies.</p> <p>SC8. Ability to develop and improve methods and scientific and technical proposals to increase the effectiveness of troop (force) support in operations.</p>
<b>7 – Learning outcomes</b>	
<b>General and professional training</b>	<p>LO1. Possess general scientific (philosophical) competencies aimed at forming a systematic scientific worldview and general cultural outlook.</p> <p>LO2. Demonstrate a systematic scientific outlook, the ability to think creatively, develop recommendations and formulate conclusions using the latest technologies in solving problems.</p> <p>LO3. To have the skills to freely present and discuss with representatives of other professional groups of different levels the results of research, scientific and applied problems of providing troops (forces), to qualitatively reflect the results of research in leading professional scientific publications, to process scientific and information sources in preparation for classes, to apply active methods of teaching disciplines.</p> <p>LO4. Knowledge and understanding of a foreign language, ability to present own scientific results orally and in writing in a foreign language, understanding of scientific and professional texts in a foreign language.</p> <p>LO5. Develop, improve and research conceptual, mathematical and computer models of processes and systems, effectively use them to obtain new knowledge and/or create innovative products in the field of support of troops (forces) and related interdisciplinary areas.</p> <p>LO6. To be able to identify scientific and practical problems</p>



	<p>and ways to solve them in the military sphere, to deeply understand the general principles and methods of military sciences, national security, state border security, as well as the methodology of scientific research, to apply them in their own research in the field of support of troops (forces) and in teaching practice.</p> <p>LO7. Analyze and apply conceptual models, scientific achievements of domestic and foreign scientists, fundamental theories in the field of support of troops (forces) and related areas.</p> <p>LO8. To develop organizational and technical measures related to increasing the efficiency of the use of forces and means of the types of support of troops (forces) and the system as a whole.</p> <p>LO9. Ability to use the methodology of modern methods of complex analysis to determine the feasibility of using new physical principles, technical solutions and technological processes in the creation of promising and improvement of existing systems of support of troops (forces).</p> <p>LO10. Ability to apply information technology and modern modeling methods using the latest application packages and programs for scientific substantiation and confirmation of own research.</p> <p>LO11. To organize and carry out the educational process in the field of support of troops (forces) and related areas, its scientific, educational, methodological and regulatory support, to apply effective methods of teaching disciplines.</p>
<b>8 – Program implementation resources</b>	
<b>Staffing/personnel</b>	<p>The program involves scientific and pedagogical and research staff who have a scientific degree and/or academic title and professional achievements in accordance with the requirements of the Licensing Conditions for the conduct of educational activities.</p>
<b>Logistics</b>	<p>Meets the technological requirements for material and technical support of educational activities in the field of higher education in accordance with the current licensing requirements of the Ministry of Education and Science of Ukraine.</p> <p>The program uses the university's classroom facilities (lecture rooms, computer labs), library (including an electronic library) with a reading room, a scientific center for distance learning, a center for simulation modeling, sports grounds, a stadium, a swimming pool of the Ministry of Defense of Ukraine, a medical unit, dining rooms and comfortable dormitories.</p>

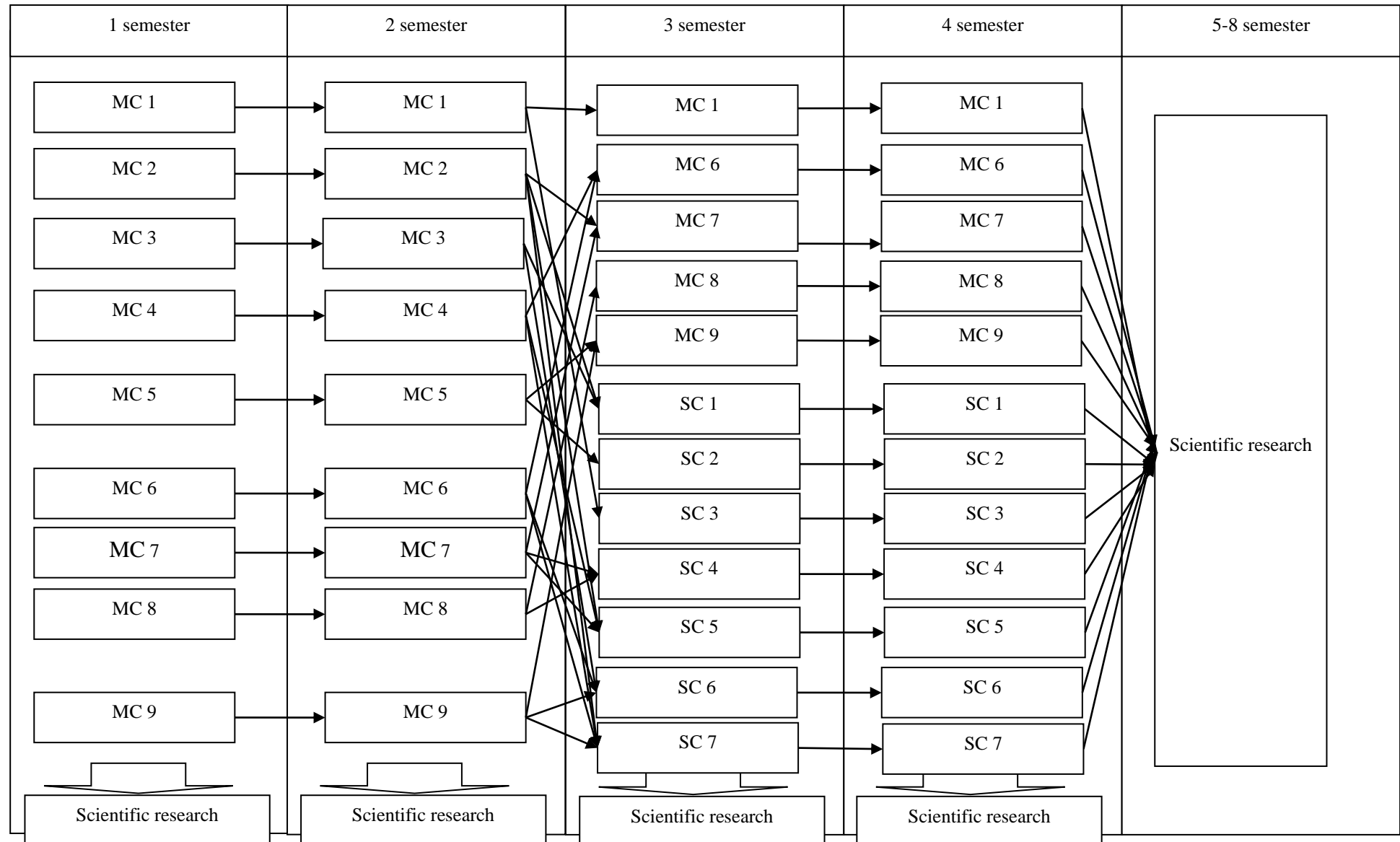
<b>Information, education and methodology support</b>	<p>The library of the National Defence University of Ukraine is provided with scientific professional periodicals of the appropriate profile, including in electronic form. There is access to databases of periodicals in English.</p> <p>There is an official website of the National Defence University of Ukraine (<a href="https://nuou.org.ua">https://nuou.org.ua</a>), which contains basic information about the educational and scientific programs, curriculum, syllabuses of educational components, educational, educational and scientific, publishing activities of the National Defense University of Ukraine and its structure, educational and scientific structural units and their composition, admission rules, contact information, etc.</p> <p>Available: Internet access; wireless Internet access points; Moodle learning environment.</p> <p>The National Defence University of Ukraine has: curriculum and working curriculum; educational process schedules; work programs of academic disciplines; educational and methodological support for each academic discipline of the curriculum; didactic materials for independent and individual work of applicants in disciplines; textbooks, textbooks, lecture notes, etc. in accordance with the list of recommended literature in each academic discipline, the number of which meets the established requirements.</p>
<b>9 – Academic mobility</b>	
<b>National credit mobility</b>	It is carried out in accordance with agreements and memorandums on scientific and scientific-technical cooperation with institutions of the National Sciences Academy of Ukraine, universities and scientific organizations
<b>International credit mobility</b>	It is carried out in accordance with the requirements established by the legislation of Ukraine for the preservation of state secrets within the limits. In accordance with cooperation agreements with foreign military universities, joint educational and scientific projects (ERASMUS +, DEEP UKRAINE Programme), involvement in international conferences
<b>Training of foreign applicants for higher education</b>	According to special agreements within the framework of educational and research projects

## 2. LIST OF COMPONENTS OF THE EDUCATIONAL AND RESEARCH PROGRAM AND THEIR LOGICAL SEQUENCE

### 2.1 List of components of the educational and scientific program

N/A code	Educational program components (academic disciplines, course projects (works), practices, qualification work)	Number of credits	Form summary Control
<b>Mandatory components of the educational and scientific program</b>			
<b>1. Gaining in-depth knowledge of the specialty</b>			
MC 1	Philosophy and methodology of science	3	E
MC 2	Theory and Methods of Scientific Research in Higher Military School	3	E
MC 3	Teaching methods in higher education	3	DT
<b>1. Obtaining universal research skills</b>			
MC 4	Basics of working with research projects and scientometric databases	3	DT
MC 5	Application of modern information technologies in scientific activities	3	E
<b>2. Obtaining language competencies</b>			
MC 6	Foreign language in scientific activity	6	E
<b>3. Acquiring in-depth knowledge of troop (force) support</b>			
MC 7	Conceptual problems of supplying troops (forces)	3	E
MC 8	Theoretical foundations of military science research in the field of troop (force) support	3	E
MC 9	Fundamentals of modeling in the field of troop (force) support	3	E
<b>4. Practice</b>			
MC 10	Педагогічна (науково-дослідницька) практика	4	Report
<b>Загальний обсяг обов'язкових компонентів</b>		<b>34</b>	
<b>5. Scientific component</b>			
	Scientific research	<b>194</b>	Defence
<b>Selective components of the educational and scientific program</b>			
<b>1. Disciplines of free choice of the PhD student</b>			
SC 1	Modern pedagogical rhetoric	3	E
SC 2	Methods of military applied research and modeling, application packages (programs)	3	DT
SC 3	Philosophy of war and peace	3	DT
SC 4	Fundamentals of assessing the effectiveness of management processes and their optimization	3	DT
SC 5	Project management in scientific research	3	DT
<b>2. Practice (selective)</b>			
SC 6	Pedagogical practice	3	Report
SC 7	Research and development practice	3	Report
<b>Total amount of elective components that an applicant can choose</b>		<b>12</b>	
<b>TOTAL VOLUME OF THE EDUCATIONAL AND SCIENTIFIC PROGRAM</b>		<b>46</b>	
<b>Total amount of training for applicants</b>		<b>240</b>	
<b>General procedure for choosing academic disciplines.</b> The applicant chooses academic disciplines from the list of elective disciplines from this EPP and other EPPs (NPs).			

## 2.2. Structural and logical scheme of the educational and scientific program



### **3. FORM OF CERTIFICATION OF HIGHER EDUCATION APPLICANTS**

Public defense of scientific achievements in the form of a dissertation. The volume of the dissertation should be 110-155 pages (from 4.5 to 7 author's sheets).

Certification is carried out openly and publicly, subject to the requirements of the legislation of Ukraine in the field of state secret protection.

A prerequisite for admission to the defense is the successful completion of the individual curriculum and individual research plan by the applicant.

Attestation is completed by issuing a document of the established form on a

#### 4. MATRIX OF CORRESPONDENCE OF PROGRAM COMPETENCIES TO THE COMPONENTS OF THE EDUCATIONAL AND SCIENTIFIC PROGRAM

	MC 1	MC 2	MC 3	MC 4	MC 5	MC 6	MC 7	MC 8	MC 9	SC 1	SC 2	SC 3	SC 4	SC 5	SC 6	SC 7
GC1	+		+	+	+		+						+	+	+	+
GC 2	+	+				+	+	+		+		+			+	+
GC 3			+	+	+		+	+	+		+		+		+	+
GC 4						+									+	+
GC 5					+				+		+				+	+
SC 1			+	+			+							+	+	+
SC 2		+				+				+					+	+
SC 3			+	+				+			+				+	+
SC 4			+	+			+	+			+			+	+	+
SC 5	+						+		+				+		+	+
SC 6		+								+		+			+	+
SC 7					+				+		+					
SC 8					+		+	+					+	+		



## **6. LIST OF RESEARCH AREAS FOR HIGHER EDUCATION STUDENTS**

1. Research of the problems of development of communication, automation of control and radio technical support in the Armed Forces of Ukraine.
2. Study of the problems of application and management of military units and logistics institutions.
3. Research of the problems of development of airfield technical and engineering airfield support.
4. Research of problems of development of engineering and aviation support.
5. Research of problems of operation and repair of weapons and military equipment of radio engineering troops.
6. Research of the problems of operation and repair of weapons and military equipment of anti-aircraft missile troops.
7. Research of problems of economic development and financial support of troops (forces). Дослідження проблем розвитку правового забезпечення військ (сил).
8. Study of the problems of electronic intelligence development.
9. Research of problems of development of military space systems.
10. Research of problems of development of information security management in the armed forces.
11. Research of problems of development of engineering support of combat operations of troops (forces).
12. Research of problems of development of topographic and navigation support of troops (forces).
13. Research of problems of development of electronic warfare.
14. Research of problems of development of radiation, chemical and biological protection of troops (forces).
15. Research of the problems of development of tank-technical and automotive support.
16. Research of problems of development of missile and artillery technical support.
17. Research of problems of development of metrological support of troops (forces).
18. Research of problems of development of logistics of military units (by types and branches of troops and forces).
19. Study of the problems of logistics development.
20. Research of problems of development of communication and automated control systems.



21. Study of problems of development of moral and psychological support of troops (forces).
22. Research of problems of development of psychological support of troops (forces).
23. Research on the problems of development of information and propaganda support of troops (forces) and ideological work in the troops.
24. Research of problems of development of personnel management in the troops (forces).
25. Research on the problems of development of information and analytical support of military management bodies.
26. Research of problems of development of protection of information with limited access in the troops (forces).
27. Research of problems of development of law enforcement in the armed forces.
28. Research of problems of development of medical support of troops (forces).
29. Research of problems of development of military-historical work in the troops (forces).
30. Research on the problems of defense management of the security and defense sector of Ukraine.