

# FEDERAL STATE EDUCATIONAL STANDARD OF HIGHER EDUCATION

Higher Education Level  
SPECIALIST'S DEGREE

speciality  
**31.05.01 MEDICAL BUSINESS**

## **I. Scope of application**

This Federal State Educational Standard of higher education is a set of requirements that are mandatory for the implementation of basic professional educational programs of higher education - specialist's programs in specialty 31.05.01 Medical business (hereinafter - the specialist's programs, specialty respectively).

## **II. Abbreviations used**

The following abbreviations are used in this Federal State Educational Standard:

GCC - general cultural competencies;

GPC - general professional competencies;

PK - professional competencies;

FSES HE - Federal State Educational Standard of Higher Education;

network form - a network-based form of educational program implementation.

## **III. The specialty characteristics**

3.1. Acquiring education in the specialist's program is allowed only in the educational organization of higher education (hereinafter - the organization).

3.2. Training in the specialist's program in organizations is carried out in full-time education.

The scope of the specialist's program is 360 credit units (hereinafter referred to as credit units), regardless of the mode of study, applied educational technologies, the implementation of the specialist's program using the network form, the implementation of the specialist's program according to individual curriculum, including accelerated education.

3.3. Term of education under the specialist's program:

in full-time education, including vacations provided after passing the state final attestation, regardless of the educational technology used, is 6 years. The volume of the specialist's program in full-time education, implemented in one academic year, is 60 credit units;

when training according to an individual curriculum, regardless of the mode of study, the period of study shall not exceed the period of education established for the relevant mode of study, and when training according to the individual curriculum of persons with disabilities period of study may be increased at their request no more than for 1 year in comparison with the term of education for the corresponding form of training. The scope of the specialist's program for one academic year when studying according to an individual curriculum may not exceed 75 credit units.

The specific period of education and the scope of the specialist's program, implemented in one academic year, according to an individual plan, are determined by the organization independently within the time limits established by this clause.

In organizations of Federal Government Agencies that provide training in the interests of the defense and security of the state, to ensure law and order, the duration of training for a specialist's program is at least 5 years due to the length of the students' vacation time. At the same time, the scope of the educational program does not change, and the volume of the specialist's program, implemented in one full-time academic year, is not more than 75 credit units

3.4. When implementing a specialist's program, an organization has the right to apply e-learning and distance learning technologies.

When teaching persons with disabilities, e-learning and distance learning technologies should provide for the possibility of receiving and transmitting information in the forms available to them.

3.5. The implementation of a specialist's program is possible using the network form.

3.6. Educational activities under the specialist's program are carried out in the state language of the Russian Federation, unless otherwise specified by the local regulatory act of the organization.

3.7. Specialist programs containing information constituting state secrets are developed and implemented in compliance with the requirements stipulated by the legislation of the Russian Federation and regulatory legal acts in the field of protection of state secrets of Federal Government Agencies that administer organizations implementing relevant programs.

#### **IV. Characteristics of professional activities of graduates who have mastered the specialist's program**

4.1. The field of professional activity of graduates who have mastered the specialist's program includes the protection of health of citizens by ensuring the provision of medical care in accordance with the established requirements and standards in the field of health care.

4.2. The objects of professional activity of graduates who have mastered the specialist's program are:

individuals (patients);

population;

set of tools and technologies aimed at creating conditions for the protection of public health.

4.3. Types of professional activity for which graduates who have mastered the specialist's program are preparing:

medical;

organizational and managerial;

research

In developing and implementing a specialist's program, an organization focuses on a specific type (types) of professional activity for which a specialist is prepared, based on the needs of the labor market, the research and material and technical resources of the organization.

4.4. A graduate who has mastered a specialist's program is ready to solve the following professional tasks in accordance with the type (types) of professional activity to which the specialist's program is oriented:

medical activity:

prevention of the occurrence of diseases among the population through preventive and anti-epidemic measures;

conducting preventive medical examinations, periodic health examination, dispensary observation;

the collection and medical-statistical analysis of information on the health indicators of the population of different age and sex groups, characterizing their health status;

diagnosis of diseases and pathological conditions of patients;

diagnosis of emergency conditions;

pregnancy diagnosis;

examination of temporary disability and participation in other types of medical expertise;

provision of primary medical and sanitary care in outpatient and day care settings;

rendering primary medical and health care in case of sudden acute diseases, conditions, exacerbation of chronic diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care;

participation in the provision of emergency medical care in conditions requiring urgent medical intervention;

emergency medical care, including participation in medical evacuation;

participation in the conduct of medical rehabilitation and sanatorium-resort treatment;

formation of motivation among the population, patients and their family members, aimed at preserving and strengthening their health and the health of those around them;

patient education on basic hygiene measures of a health-improving nature, contributing to the prevention of the onset of diseases and health promotion;

organizational and management activities:

application of the basic principles of the organization of medical care in medical organizations and their structural units;

creation in medical organizations of favorable conditions for the stay of patients and the work of medical personnel;

keeping medical records in medical organizations;

organization of medical expert consultation;

participation in the organization of the assessment of the quality of care for patients;

compliance with basic information security requirements;

research activities:

analysis of scientific literature and official statistical reviews, participation in the conduct of statistical analysis and public presentation of the results;

participation in solving individual research, scientific and applied tasks in the field of health care for diagnosis, treatment, medical rehabilitation and prevention.

## **V. Requirements for the results of mastering a specialist's program**

5.1. As a result of mastering a specialist's program, general cultural, general professional and professional competencies should be formed at the graduate.

5.2. A graduate who has mastered a specialist's program should have the following general cultural competencies:

the ability to abstract thinking, analysis, synthesis (general cultural competencies - 1);

the ability to use the basics of philosophical knowledge to form the ideological position (general cultural competencies - 2);

the ability to analyze the main stages and patterns of the society historical development for the formation of citizenship (general cultural competencies - 3);

the ability to act in non-standard situations, to bear social and ethical responsibility for the decisions made (general cultural competencies - 4);

readiness for self-development, self-realization, self-education, the use of creative potential (general cultural competencies - 5);

the ability to use methods and means of physical education to ensure full social and professional activities (general cultural competencies - 6);

readiness to use first aid techniques, methods of protection in emergency situations (general cultural competencies - 7);

readiness to work in a team, tolerantly perceive social, ethnic, confessional and cultural differences (general cultural competencies - 8).

5.3. A graduate who has mastered a specialist's program should have the following general professional competencies:

readiness to solve standard tasks of professional activity using information, bibliographic resources, biomedical terminology, information and communication technologies and taking into account the basic requirements of information security (general professional competencies - 1);

readiness for communication in oral and written forms in Russian and foreign languages for solving the tasks of professional activity (general professional competencies - 2);

the ability to use the basics of economic and legal knowledge in professional activities (general professional competencies - 3);

the ability and readiness to implement ethical and deontological principles in professional activities (general professional competencies - 4);

the ability and readiness to analyze the results of their own activities to prevent professional errors (general professional competencies - 5);

readiness to keep medical records (general professional competencies - 6);

readiness to use basic physicochemical, mathematical and other natural science concepts and methods in solving professional problems (general professional competencies - 7);

readiness for medical use of drugs and other substances and their combinations in solving professional problems (general professional competencies - 8);

the ability to assess morphofunctional, physiological states and pathological processes in the human body to solve professional problems (general professional competencies - 9);

readiness to ensure the organization of patient care and the provision of primary pre-medical health care (general professional competencies - 10);

readiness for the use of medical devices provided for by the procedures for providing medical care (general professional competencies - 11).

5.4. A graduate who has mastered a specialist's program must have professional competencies corresponding to the type (types) of professional activity to which the specialist's program is oriented:

medical activity:

ability and readiness to implement a set of measures aimed at preserving and promotion of health and including the formation of a healthy lifestyle, preventing the occurrence and (or) spread of diseases, their early diagnosis, identifying the causes and

conditions of their occurrence and development, as well as aimed at eliminating harmful effects on human health of environmental factors (professional competencies - 1);

ability and readiness to conduct preventive medical examinations, periodic health examination and implementation of dispensary observation (professional competencies - 2);

the ability and readiness to conduct anti-epidemic measures, organization of protection of the population in the nidus of especially dangerous infections, with a deterioration of the radiation situation, natural disasters and other emergency situations (professional competencies - 3);

the ability and readiness to use social hygienic methods of collecting and medical-statistical analysis of information on health indicators of the population (professional competencies - 4);

readiness to collect and analyze patients complaints, their medical history, examination results, laboratory, instrumental, pathological and other studies in order to recognize the condition or establish whether the disease is present or not (professional competencies - 5);

the ability to determine in a patient the main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Health Problems, X revision (professional competencies - 6);

readiness for the examination of temporary disability, participation in the conduct of medical and social expertise, ascertaining the biological death of a person (professional competencies - 7);

the ability to determine the tactics of managing patients with various nosological forms (professional competencies - 8);

readiness for management and treatment of patients with various nosological forms in outpatient and day hospital conditions (professional competencies - 9);

readiness to provide medical care in case of sudden acute diseases, conditions, exacerbation of chronic diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care (professional competencies - 10);

readiness to participate in the provision of emergency medical care in conditions requiring urgent medical intervention (professional competencies - 11);

readiness to maintain a physiological pregnancy, childbirth (professional competencies - 12);

readiness to participate in the provision of medical assistance in emergency situations, including participation in medical evacuation (professional competencies - 13);

readiness to determine the need for the use of natural therapeutic factors, drug, non-drug therapy and other methods in patients in need of medical rehabilitation and sanatorium-resort treatment (professional competencies - 14);

readiness to teach patients and their relatives basic hygiene measures of a health-improving nature, skills of self-monitoring of basic physiological indicators that contribute to the preservation and promotion of health, and the prevention of diseases (professional competencies - 15);

readiness to educate on the elimination of risk factors and the formation of skills for a healthy lifestyle (professional competencies - 16);

organizational and management activities:

the ability to apply basic principles of organization and management in the field of public health, in medical organizations and their structural subdivisions (professional competencies - 17),

readiness to participate in assessing the quality of care with the use of basic medical and statistical indicators (professional competencies - 18);

ability to organize medical assistance in emergency situations, including medical evacuation (professional competencies - 19);

research activities:

readiness for analysis and public presentation of medical information based on evidence-based medicine (professional competencies - 20);

ability to participate in research (professional competencies - 21);

readiness to participate in the introduction of new methods and techniques aimed at protecting the health of citizens (professional competencies - 22).

5.5. When developing a specialist's program, all general cultural, general professional and professional competencies related to the types of professional activities that the specialist's program is focused on are included in the set of required results of mastering the specialist's program.

5.6. When developing a specialist's program, an organization has the right to supplement the set of graduates' competencies, taking into account the focus of the specialist's program on specific areas of knowledge and (or) type (types) of activity or program specialization.

5.7. When developing a specialist's program, the requirements for the results of training in individual disciplines (modules) and practitioners are set by the organization independently, taking into account the requirements of the corresponding approximate basic educational programs.

5.8. Specialist's programs implemented in the interests of defense and security of the state, ensuring law and order in the Federal State Organizations under the jurisdiction of the Federal State bodies referred to in Paragraph 1 of Article 81 of the Federal Law of December 29, 2012 No. 273-Φ3 "On Education in the Russian Federation" (hereinafter - the Federal Government bodies) are developed on the basis of the requirements provided for by the Federal Law of December 29, 2012 No. 273-FZ "On Education in the Russian Federation", and qualifications qualification requirements for military

vocational training, special vocational training for graduates established by the Federal Government body in charge of the relevant organizations.

## **VI. Requirements for the structure of a specialist's program**

6.1. The structure of the specialist's program includes the obligatory part (basic) and the part formed by the participants of educational relations (variable). This provides the possibility of implementing specialist's programs with different specializations within the same specialty).

6.2. The specialist's program consists of the following blocks:

Block 1 "Disciplines (modules)", which includes disciplines (modules) relating to the basic part of the program and disciplines (modules) relating to its variable part.

Block 2 "Practices, including research work (R&D)", which fully relates to the basic part of the program.

Block 3 "State final certification", which fully relates to the basic part of the program and ends with the assignment of qualifications specified in the list of specialties and areas of higher education approved by the Ministry of Education and Science of the Russian Federation.

### **Specialist's program structure**

Table

<b>Specialist's program structure</b>		<b>Scope of specialist's program in credit units</b>
Block 1	Disciplines (modules)	324-330
	Basic part	288-294
	Variable part	36
Block 2	Practices, including research work (R&D)	27-33
	Basic part	27-33
Block 3	State final certification	3
Scope of specialist's program		360

6.3. Disciplines (modules) and practices related to the basic part of the specialist's program are mandatory for students to master, taking into account the specialization of the program that they masters. The set of disciplines (modules) and practices related to the basic part of the specialist's program, the organization determines independently in the amount established by this FSES HE, taking into account the corresponding (relevant) exemplary (approximate) basic (core) educational program (programs).

6.4. Disciplines (modules) in philosophy, history, foreign language, life safety are implemented within the framework of the basic part of Block 1 "Disciplines (modules)" of the specialist's program. The scope, content and order of implementation of these disciplines (modules) are determined by the organization independently.

6.5. Disciplines (modules) in physical education and sports are implemented in the framework of:

the basic part of Block 1 "Disciplines (modules)" of the specialist's program in the amount of not less than 72 academic hours (2 credit units) in full-time education;

elective disciplines (modules) in the amount of not less than 328 academic hours. The specified academic hours are obligatory for mastering and in credit units not translated.

Disciplines (modules) in physical education and sports are implemented in the manner prescribed by the organization. For persons with disabilities and persons with disabilities, the organization establishes a special procedure for the development of disciplines (modules) in physical education and sports, taking into account their health status.

In the organizations of Federal Government agencies that provide training in the interests of the defense and security of the state, ensuring law and order, within the basic part of Block 1 "Disciplines (modules)", the discipline (module) "Physical training" is implemented in the amount of at least 11 degrees of the full-time study.

6.6. Disciplines (modules) related to the variable part of the specialist's program, determine, among other things, the specialization of the specialist's program.

The set of disciplines (modules) relating to the variable part of the specialist's program, the organization determines independently in the amount established by the FSES HE. After a student selects a program specialization, a set of relevant disciplines (modules) becomes mandatory for students to master.

6.7. Block 2 "Practices, including research work (R & D)" includes educational and industrial practices.

Type of practical training:

practice for obtaining primary professional skills, including primary skills of research activities;

clinical practice.

Practical training conducting method:

inpatient.

Types of on-the-job training:

practice of obtaining professional skills and professional experience;

clinical practice;

research work.

Practical training conducting ways:

inpatient;

mobile

When developing specialist's programs, an organization selects types of practices depending on the type (types) of activity to which the specialist's program is oriented. The organization has the right to provide in the specialist's program other types of practices in addition to those established by the present FSES HE.

Training and (or) practical training can be conducted in the structural units of the organization.

The choice of places of practice for people with disabilities is made taking into account the health status of students and accessibility requirements.

6.8. In Block 3 "State final certification" includes preparation for passing and passing the state exam.

6.9. The implementation of practical training of students, carried out in accordance with the procedure for organizing and conducting practical training of students on professional educational programs of medical education, pharmaceutical education, as well as state final certification, is not allowed with the use of e-learning, distance learning technologies.

6.10. When developing a specialist's program, students are provided with the opportunity to master the disciplines (modules) optionally, including special conditions for disabled people and persons with disabilities, in the amount of not less than 30 percent of the variable part of Block 1 "Disciplines (modules)".

6.11. The number of hours allotted for lecture-type classes, as a whole in Block 1 "Disciplines (modules)" should not exceed 30 percent of the total number of hours of classroom training planned for the implementation of this Block.

## **VII. Requirements for the implementation conditions of the specialist's program**

7.1. System-wide requirements for the implementation of a specialist's program .

7.1.1. The organization should have a material and technical base that complies with applicable fire regulations and standards and ensures the conduct of all types of disciplinary and interdisciplinary training, practical and research work of students as provided by the curriculum.

7.1.2. During the entire period of study, each student should be provided with individual unlimited access to one or several electronic library systems (electronic libraries) and to the organization's electronic information and educational environment. The electronic library environment should provide the student with access from any place where there is access to the information-telecommunication network Internet (hereinafter referred to as the Internet), both within the organization and outside it.

The organization's electronic information and educational environment should provide:

access to curricula, work programs of disciplines (modules), practices, to publications of electronic library systems and electronic educational resources indicated in the work programs;

fixing the course of the educational process, the results of intermediate certification and the results of mastering the main educational program;

conducting all kinds of classes, procedures for assessing learning outcomes, the implementation of which is provided for using e-learning, distance learning technologies;

the formation of an electronic portfolio of the student, including the preservation of the student's work, reviews and assessments of these works by any participants in the educational process;

interaction between participants of the educational process, including synchronous and (or) asynchronous interaction via the Internet.

The functioning of the electronic information and educational environment is ensured by appropriate means of information and communication technologies and the qualifications of the employees who use and support it. The functioning of the electronic information and educational environment must comply with the legislation of the Russian Federation.

7.1.3. In the case of the implementation of a specialist's program in a network form, the requirements for the implementation of a specialist's program should be provided with a set of material and technical support resources provided by organizations participating in the implementation of a specialist's program in a network form.

7.1.4. In case of implementation of a specialist's program on the departments created in accordance with the established procedure in other organizations or other structural divisions of the organization of the requirement for the implementation of the specialist's program should be provided with a set of resources of these organizations.

7.1.5. The qualifications of the management and scientific and pedagogical workers of the organization must comply with the qualification characteristics established in the Unified Qualification Reference Book of Managers, Specialists and Employees, in the section "Qualification Characteristics of Managers and Specialists of Higher Professional and Additional Professional Education", approved by order of the Ministry of Health and Social Development of the Russian Federation dated January 11, 2011 No. 1n (Registered by the Ministry of Justice of the Russian Federation on March 23, 2011, registration number 20237), and профессиональным стандартам (при наличии).

In organizations under the jurisdiction of Federal State bodies, the qualification characteristics of the positions of managers and faculty members of higher education and additional professional education are determined in accordance with the legislation of the Russian Federation.

7.1.6. The share of full-time scientific and pedagogical workers (in the rates given to integer values) must be at least 50 percent of the total number of scientific and pedagogical workers of the organization.

7.2. Requirements for staffing conditions for the implementation of a specialist's program .

7.2.1. The implementation of the specialist's program is provided by the management and scientific and pedagogical workers of the organization, as well as by persons

involved in the implementation of the program of the specialty under the terms of a civil law contract.

7.2.2. The share of scientific and pedagogical workers (in terms of integer rates) with an education corresponding to the profile of the taught discipline (module), in the total number of scientific and pedagogical workers implementing the specialist's program, must be at least 70 percent.

7.2.3. The share of academic staff (in terms of integer rates) with a degree (including a degree awarded abroad and recognized in the Russian Federation) and (or) an academic title (including an academic title obtained abroad and recognized in the Russian Federation), in the total number of scientific and pedagogical workers implementing the specialist's program, must be at least 65 percent.

experience of military service (service in law enforcement agencies) in the region and with objects of professional activity corresponding to the program of specialty, not less than 10 years, military (sectoral) rank not lower than "Major" ("captain III rank"), as well as having combat experience, or state awards, or state (sectoral) honorary titles, or state awards.

Among the scientific and pedagogical workers with the academic degree of doctor of Sciences and (or) the academic title of Professor, teachers of military and professional disciplines (modules), special professional disciplines (modules) with the academic degree of candidate of Sciences, having either state awards, or state (branch) honorary titles, or national awards can be taken into account.

7.2.4. The proportion of employees (in terms of integer rates) of the number of managers and employees of organizations whose activities are related to the orientation (profile) of the realized specialist's program (having a work experience in the professional field of at least 3 years) in the total number of employees implementing the specialist's program, must be at least 10 percent.

7.3. Requirements for the material, technical and educational support of the specialist's program.

7.3.1. Special premises should be classrooms for lecture-type classes, seminar-type classes, course design (coursework), group and individual counseling, monitoring and interim certification, as well as premises for independent work and premises for the storage and preventive maintenance of educational equipment. Special premises should be equipped with specialized furniture and technical training aids that serve to present educational information to large audience.

For conducting lecture-type classes, sets of demonstration equipment and visual aids are provided, providing thematic illustrations corresponding to exemplary programs of disciplines (modules), working curricula of disciplines (modules).

The list of material and technical support necessary for the implementation of a specialist's program includes laboratories equipped with laboratory equipment, depending on the degree of its complexity. Specific requirements for material, technical and educational support are determined in the approximate basic educational programs.

Rooms for independent work of students should be equipped with computer equipment with the ability to connect to the Internet and provide access to the organization's electronic information and educational environment.

In the case of e-learning, distance learning technologies, it is allowed to replace specially equipped premises with their virtual counterparts, which allow students to master the skills and abilities provided for by their professional activities.

In the case of non-use of the electronic library system (electronic library) in the organization, the library fund must be completed with printed publications at the rate of at least 50 copies of each of the main literature publications listed in the work programs of disciplines (modules), practices and at least 25 copies of additional literature on 100 students.

7.3.2. The organization must be provided with the necessary set of licensed software (the composition is defined in the work programs of the disciplines (modules) and is subject to annual updating).

7.3.3. Electronic library systems (electronic library) and electronic information-educational environment should provide simultaneous access of at least 25 percent of students in the specialist's program.

7.3.4. The students should be provided with access (remote access), including in the case of e-learning, distance learning technologies, to modern professional databases and information reference systems, the composition of which is determined in the work programs of the disciplines (modules) and is subject to annual updates.

7.3.5. Students with disabilities should be provided with printed and (or) electronic educational resources in forms adapted to their health restrictions.

7.4. Requirements for the financial conditions of the implementation of the specialist's program.

7.4.1. Financial support for the implementation of a specialist's program should be in the amount not lower than the basic standard costs for providing state services in the field of education for a given level of education and training areas, taking into account correction factors that take into account the specifics of educational programs established by the Ministry of Education and Science of the Russian Federation, the cost of providing public services for the implementation of educational programs of higher education trainings in specialties (field of education) and integrated groups of specialties (field of education), approved by order of the Ministry of Education and Science of the Russian Federation of October 30, 2015 No. 1272 (registered by the Ministry of Justice of the Russian Federation on November 30, 2015, registration number 39898).

7.4.2. In an organization in which the legislation of the Russian Federation provides for military or other equivalent services, service in law enforcement agencies, financial support for the implementation of the specialist's program should be carried out within the budget allocations of the Federal budget allocated by the Federal Executive Body.