**ANNOTATION**

of educational program

**09.06.01 Computer Science and Engineering**

**Qualifications (degree)**: Researcher. Teacher-researcher

**Program Name**: 09.06.01 Computer Science and Engineering

**Objectives**: to give graduates the basic human, social, economic, mathematical and natural science knowledge; to prepare postgraduate students ready to work successfully in the activities associated with the operation of computers, systems, computer networks, creation of elements and devices of computer technology on new physical and technical principles, methods, processing and storage of information, algorithms, programs, programming languages and human-machine interfaces, the development of new mathematical methods and tools to support data mining, development of information and computer-aided design and control systems in the appendix to the different subject areas, effective use of computer technology in general, the development of high-tech software and other fields of applied mathematics and computer science; to prepare postgraduates having the universal and subject-specialized competencies, promoting their social mobility and stability in the labor market.

**Terms of training** in full-time education are 4 years.

**Graduate Departments**: Department of Information Technology.

**The area of professional activity**: includes spheres of science, engineering, technology and pedagogic, covering a set of tasks of the specialization "Computer Science and Engineering", including the development of the theory, design, implementation and operation of advanced computer systems, networks and systems, and mathematical software.

**Objects of professional activity**: the chosen area of scientific knowledge, as well as scientific tasks of the interdisciplinary nature, containing:

- computers, systems and networks;

- software, computer equipment and automated systems (programs, software and systems);

- mathematical, informational, technical, linguistic, software, ergonomic, organizational and legal support of automated information, computing, designing and control systems;

- high-performance computing and supercomputing equipment;

- technology development of technical computer equipment and software;

- data structures, database and knowledge database, the management system of database and knowledge database.

**Features of the curriculum**: while drawing up the curriculum general requirements to the implementation of basic educational programs, formulated in the National Research Nuclear University MEPhI for the training profile 09.06.01 Computer Science and Engineering were taken into account.

Postgraduate program consists of the following parts:

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

Part 2. "Practice", fully relating to the variable part of the program.

Part 3. "Research", which fully applies to the variable part of the program.

Part 4. "State final examination", fully applies to the base part of the program and finishes with the qualification "Researcher. Teacher-researcher".

**The list of enterprises for practical training and employment of graduates**: With the implementation of this curriculum program the practice (including teaching practice) to obtain professional skills and professional experience is provided. Methods of practice: stationary and fielding. The practice can be carried out in subdivisions of Dimitrovgrad Engineering and Technological Institute of the National Research Nuclear University "MEPhI" (DETI NRNU MEPhI), as well as in educational and research organizations of the region. Places of employment of graduates are the structural units of DETI NRNU MEPhI, as well as educational and research organizations of the region.