**Specialist program abstract in the field of training**

**14.05.02 Nuclear stations: design, operation and engineering**

*1. Code and name of the field of training, the name of the program*.

14.05.02 Nuclear stations: design, operation and engineering, specificity – «Control and management system of nuclear power plants».

*2. Program educational objectives*: to develop students' general cultural, general professional and professional competences in accordance with the requirements of the educational standard of higher education, independently defined by NRNU MEPhI in this specialty.

Forms and terms of education: full - time- training period - 5.5 years.

Entrance examinations – Mathematics, Physics, Russian.

*3. The characteristic of professional activity of graduates of the GEP of specialist course:* **The area of professional activity of graduates includes:** a combination of technical means, techniques and methods of human activity related to the design, manufacture and operation of nuclear power plants (AU) and other nuclear power plants, producing, converting and utilizing thermal and nuclear energy, including the constituent systems of control, protection, management and assurance of nuclear and radiation safety.  
 **The objects of professional activity are:** nuclear physics, thermo-hydraulic and electric processes in the equipment and devices for production, converting and utilizing of nuclear and heat energy; nuclear energy, thermo mechanical and electrical equipment of nuclear power plants and other nuclear power plants (hereinafter - NPP); the processes of parameter control, monitoring, protection and diagnostics of nuclear power plants; information-measuring equipment and control, system monitoring, control, protection and security, hardware and software complexes of information and control systems of nuclear power installations, automated control systems of technological processes (hereinafter - TP) of nuclear power plants; safety operation and radiation monitoring of nuclear facilities and plants; thermal power plants as objects of human activity associated with their construction and operation.  
 **Types of professional activity**: research; design; industrial technology and innovation; organizational management.  
 **Undergraduate profession**: heat power engineer, power engineer, a specialist in plant operation, an expert on nuclear security.  
 **Employment**: operation of nuclear power plants and nuclear facilities, research institutes.  
 Minimum exam marks for a competitive group: Mathematics – 38, Physics – 40; Russian – 38.