**Master's Degree program**

**27.04.03** **System Analysis and Management**

**Field of study:** **The Theory and Mathematical Methods of Systems Analysis and Management in Technical Systems.**

**Program goals:** education **of masters** specialized **in the field of systems analysis and decision-making during design and operation of difficult technological systems, such as nuclear power plants.**

**Duration of training:** 2 years (Full-time); 2 years 6 months (Correspondence education)

**Basic department:** **Information and managing systems (VETI NRNU MEPhI)**

**Field of professional activity:**the area of science, technique and technology providing development of theoretical bases and creation of information and analytical, management information, design, project and technological complexes, systems, instruments and devices (technical objects and systems) on the basis of theoretical and pilot studies for design, constructing and operation using the principles, methods and means of human activities on the basis of systems analysis, synthesis, control, simulation of technical objects and systems of different functions.

**Objects of professional activity:** management information, design, project and technological systems in the field of technique and technology which development requires application of systems analysis methods, control, simulation, algorithmic and software for high-quality design, construction and operation.

**Curriculum features:** the curriculum is made taking into account training of future graduate for successful work in all modern hi-tech spheres where modern management information technologies are applied.

The curriculum includes the following disciplines: "Mathematical Fundamentals of the Management Theory", "Methods of Multicriteria Optimization", "Information Security and Protection", "Corporate Networks", "Case and Olap Technologies", "Theory of Decision-making in the Conditions of Uncertainty", "Information Modeling in Technical Systems", "Management in Diagnostic Systems and Data Interpretation", "Methods of the Analysis and Data Processing", "Information Systems of Decision-making Support", "Simulation Modeling", etc. Carrying out all types of laboratory works and practical training is provided with modern material and technical resources.

**The list of enterprises for practical training and graduate employment:**

JSC Rosenergoatom Concern "Rostov nuclear power plant", "Atommash" the branch of JSC “AEM Technologies” (Volgodonsk), the Federal State Unitary Enterprise "Russian Federal Nuclear Center All-Russian Research Institute of Experimental Physics", LLC “Polesie”, JSC “Volgodonsk Plant of Metallurgical and Power Equipment”, JSC “Volgodonsk Research Institute of Nuclear Mechanical Engineering”, JSC “Atommashexport”, LLC Separate Design and Technology Bureau “Energomash”.