

14.04.01 Nuclear Power Engineering and Thermophysics

Modern technology of light water nuclear reactors

Program objective

To train specialists in the field of physics and thermophysics, nuclear and radiation safety, and control systems for nuclear facilities.

The program provides training for the following specializations:

- Radiation safety of humans and the environment
- Automation of physical units and their components
- Physics and thermophysics of nuclear power facilities

Areas of professional activity:

- development, creation and operation of nuclear facilities;
- creation and development of automatic and automated control systems for nuclear facilities and their physical elements
- creation and development of physical protection systems for nuclear facilities and materials
- design and use of mathematical models for the control systems;
- design and calculation of radiation shielding
- safe handling of used nuclear fuel and radioactive nuclear wastes.