

14.04.01 Nuclear Power Engineering and Thermophysics

Promising Nuclear Reactors and Power Facilities

Program objective

to train specialists for design, construction and operation of nuclear power plants and other nuclear facilities that generate, convert and use thermal and nuclear energy.

Curriculum features

- nuclear reactors, thermonuclear reactors, fusion and power plants,
- thermohydraulic and neutron-physical processes in the nuclear reactor cores and blankets, coolants
- thermal measurements and control
- nuclear reactor materials
- nuclear fuel cycle
- nuclear power plant safety and control systems
- software and mathematical models for theoretical and experimental research of phenomena and regularities of thermophysical energy
- promising methods of energy conversion.