

14.05.04 Electronics and Automatics of Physical Facilities

Automated, Information and Measurement Systems of Physical Facilities

Program objective

training of specialists for the State Corporation Rosatom enterprises and organizations in the field of control systems and automation of physical and nuclear-physical facilities.

Objects of research and professional activities:

- nuclear-physical facilities and physical systems for safe operation
- information and measurement systems
- control systems,
- automated control of nuclear and physical facilities and their elements
- technologies for design and development of automated control systems

Curriculum features

- Electronics: digital systems and devices;
- Algorithmic programming technologies;
- Theory and systems of automatic control;
- Theoretical foundations of information technology;
- Digital automatic control systems
- Technology and equipment of nuclear power plants
- Automation of NPP control
- Design of microprocessor control systems
- Research work using the software and hardware of specialized educational and scientific laboratories of the department.

A distinctive feature of the program is the active use of modern software and hardware tools of specialized laboratories of the department, equipped with standard equipment and software for the NPP APCS, as well as modern software systems for automated research, modeling and design of electronic equipment for monitoring and control systems of physical facilities.

Research and professional opportunities

- industry research institutes
- design and production enterprises and organizations of the State Corporation Rosatom
- research institutes of the Russian Academy of Sciences