Electronics and Automation of Physical Facilities (14.05.04)

Nanoelectronic Devices for Physical Facilities

Program objective:

to train R&D specialists for micro- and nanoelectronic systems of physical experiment, development of computing systems and control systems based on modern microprocessors, analog-digital devices, optoelectronic and nanoelectronic devices; research of the physical characteristics of integrated circuits, microsystem technology in extreme conditions.

During training, students study methods for computer-aided design of submicron and nanoscale integrated circuits and systems based on such circuits.

Curriculum features:

- Integrated microwave systems;
- High performance systems;
- Radiation research methods;
- Nuclear electronics;
- Fault-tolerant devices elements.