

11.03.04 **Electronics and Nanoelectronics**

Opto- and Nanoelectronics, Nanosystem Engineering

Program objective:

To train specialists who are able to carry out fundamental research for the following areas of contemporary physics: physics of nanostructures, nanoelectronics and nanophotonics, organic electronics and sensor nanohybrid systems.

Students can develop methods, technologies and tools for solving the security problem in the design and construction of nanoelectronic and nanophotonic devices.

Curriculum features:

- Semiconductor physics;
- Materials science in micro- and nanoelectronics;
- Measurements in micro- and nanoelectronics;
- Microprocessor systems;
- Heterostructure and microwave electronics technologies;
- Atomic and molecular processes.