

## **Electronics and Nanoelectronics 11.03.04**

### Nanoelectronics, Spintronics and Photonics

#### **Program objective:**

To study priority R&D areas of research and development of promising nanoelectronics, spintronics and photonics: heterostructure electronics, electronics based on wide-gap semiconductors, graphene, carbon nanotubes, etc.

#### **Curriculum features:**

- Semiconductor physics;
- Solid-state electronics;
- Integrated circuit technology;
- Introduction to modern nanotechnology;
- Materials science in micro- and nanoelectronics;
- Heterostructure and microwave electronics technology;
- Measurements in micro- and nanoelectronics;
- Spintronics;
- Microprocessor systems.

#### **Practical training**

Nanotechnology Research and Education Center a unique research center in Russia with up-to-date equipment.