

### **12.04.03 Photonics and Optoinformatics**

#### **«Microwave technologies and systems»**

The program provides fundamental knowledge in optics, photonics, and condensed matter physics, as well as advanced subjects such as microwave photonics, nanophotonics, terahertz photonics.

#### ***Unique disciplines:***

- Microwave photonics
- Mathematical methods and applied software packages in nanophotonics
- Theoretical Nanophotonics
- Terahertz Photonics
- Nanooptics and nano-materials

#### ***Professional opportunities:***

- fundamental and applied research work in photonics and opt. informatics
- devices and systems of microwave photonics
- materials and systems, methods and technologies for optical transfer, transformation and storage of information
- systems on the base of nano-scale structures.