

**Computer science and engineering**  
**System programming and artificial intelligence technologies**



**Field of professional activity:**

- connection;
- information and communication technologies (in the field of design, development, implementation and operation of computer equipment and information systems, management of their life cycle).

**What positions can graduates hold:**

- ✓ system programmer;
- ✓ programmer;
- ✓ system administrator of information and communication systems;
- ✓ specialist in administration of network devices of information and communication systems;
- ✓ software tester;
- ✓ database administrator;
- ✓ system analyst;
- ✓ artificial intelligence specialist

**Our partners are companies for employment and internship:**

- Scientific and production enterprise "Yugpromavtomatization",
- Radioavionics,
- Research and Design Institute of Informatization, Automation and Communication in Railway Transport (NIIAS),
- Rostov Information and Computing Center is a structural subdivision of the "Main Computing Center"-a branch of JSC "Russian Railways".

**In the course of training, disciplines will be studied:**

- ❖ System software of computing systems;
- ❖ Programming technologies;
- ❖ Operating systems;
- ❖ Programming system utilities and device drivers;
- ❖ Computing systems and networks;
- ❖ Circuit design and architecture of computing systems;
- ❖ Programming of microprocessor devices;
- ❖ Information security and information protection;
- ❖ Object-oriented programming;
- ❖ Visual programming and graphical interfaces;
- ❖ Databases;
- ❖ Development of mobile applications and augmented reality;
- ❖ Artificial intelligence systems and technologies;
- ❖ Big Data and Mining;
- ❖ Theory of machine learning and pattern recognition and others.