**Division**: School of Electronic Engineering and Computer Science

**Academic programme**: 27.04.04 Control in Technical Systems, Software and Technical Tools and Systems for Control Automation

Mode of study: part-time

**Programme length**: 2.5 years

Programme level: Master's degree

Language of instruction: Russian

**Programme description**: The Automation of Technological Processes and Production programme is aimed at training Master's degree students in the field of control automation based on using cutting-edge computer engineering in various fields of manufacturing and municipal services. The process of training is organized at world-class laboratories equipped with the up-to-date computers and equipment of well-known companies in the field of automation, such as Siemens, Omron, Schneider Electric, Endress+Hauser. The laboratories provide a complex of technical means of all levels of Computer-aided Process Control System: field level of sensors and actuators, controller level, field networks of data transmission and level of workstations of operational control.

## Main programme-specific classes:

- Computer Control Technologies in Technical Systems;
- Intelligent Systems;
- Information Databases;
- Modern Problems of Control Theory;
- Mathematical Modelling of Objects and Control Systems;
- Computer-aided Design of Control Means and Systems;
- Regulatory Support of the Design of Computer-aided Process Control System;
- Methods of Synergetics in Control Theory;
- Automated Systems of Dispatching and Control of Engineering Infrastructure in Manufacturing and Municipal Services;
- Identification and Diagnostics of Control Systems.

**Programme manager:** *Tatiana A. Barbasova, Doctor of Sciences (Engineering), Head of the Department of Automation and Control*