

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: *full-time*

Programme length: *2 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*