

*Undergraduate: 15.03.04.*

*Bachelor's direction: Automation of technological processes and production.*

*Profile: Systems and automation equipment in industry*

*Institute of high technologies*

*Department of Automation and Control*

*Qualification: Bachelor*

*Duration: 4 years*

*Form of study: on campus*

The use of automated control systems for technological processes of modern industries in various industries is necessary to improve the quality of production, optimize the production process, stabilize the operation of the enterprise, and obtain a quality product.

The aim of the direction "Automation of technological processes and production" is to train highly qualified specialists who implement and operate intelligent, highly efficient automated control and monitoring systems in various industries; develop software for existing and newly designed automated systems; carry out the selection of technical means of automation, installation and commissioning of equipment for automated systems.

In this course, students study computer and information technology, microprocessor technology, network technologies, automatic control theory, design of automation devices and devices, metrology, modeling systems and processes, computer-aided design systems, programmable logic controllers in control systems.

Learning outcomes:

- ✓ Design and implementation of elements of automated production management systems;
- ✓ Assessing the functioning of the control object, means and automation systems, ensuring their safe and efficient operation;
- ✓ Development of algorithmic and software for automation tools and systems;
- ✓ The use of modern computer technology to control technological processes;
- ✓ Installation and adjustment of devices and automation equipment, assessment of their technical condition and performance;
- ✓ The ability to adjust and debug the software of technological process control systems.

*As a graduate of the direction "Automation of technological processes and production", you can carry out professional activities in various organizations and in the following industries:*

- Energy;
- Aircraft building;
- Engineering;
- Metallurgical;
- Petrochemical;
- Food;
- Design organizations.

*After graduation, you can hold the following positions:*

- Engineer for automated production control systems;
- Software engineer;
- Metrologist;
- Commissioning and testing engineer;
- Design engineer.