

Mechatronics and Robotics

South Ural State University

Language of study: **Russian**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **yes**

Price: **151 800 rubles**

Programme webpage at the university website:

<https://www.susu.ru/en/education/bachelors-specialist-degree-programs/150306-mechatronics-and-robotics>

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Areas of professional knowledge of graduates: design, research, production and operation of mechatronics and robotic systems for the use in automated production, transport, agriculture, medicine and other fields.

Objects of professional activity

The objects of professional activity of graduates are mechatronics and robotic systems, including information and sensor, actuating and control modules, their mathematical and algorithmic support, software, methods and means of their design, modeling, experimental research, debugging and operation, research and production testing of mechatronics and robotic systems with different application areas.

Types of professional activity

- service and operational;
- organizational and managerial;

Professional activities service and operation:

- programming, debugging, adjustment, tuning of mechatronic and robotic systems and their subsystems during their operation;
- preventive maintenance and functional diagnostics of systems;
- writing operating instructions for mechatronics and robotic systems and development of routine testing programs;
- writing applications for equipment and components, writing technical documentation for equipment repair.
- organization and management:
- writing organizational and technical documentation (schedules, instructions, plans, estimates) as well as reports in accordance with approved forms;
- organization of work of small groups of engineers and technical workers;
- prevention of industrial injuries, occupational diseases;
- certification of hardware, systems, processes, equipment and materials.

Specializations within this programme

Technology and organization of construction

Mechatronics and Robotics (Mechatronic systems in automated production)

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