

Specialty 1-45 80 01 "Infocommunication systems and networks"

Profile: Information and communication technologies (ICT)

Degree – Master

The master is designed to work: at enterprises and organizations of the IT industry; in companies of Internet providers, telecom operators and cloud services, providers of smart network technologies, television companies, media studios; in development companies of control devices, signal processing and multimedia data for various network-centric systems; in the subdivisions of technical operation of data processing centers, CCTV networks, corporate networks of banks, enterprises and organizations.

The master has knowledge in the following main areas: statistical communication theory; cryptographic protection of information; automated control; information flow management; system analysis and decision making; microcontrollers and signal processors; programmable logic integrated circuits; interfaces and protocols of infocommunication systems; protection of infocommunication networks; video surveillance and video analytics; neural networks and machine learning; distributed processing, storage and analysis of data; noise-immune coding in radio communication systems; design of radio communication systems and networks; infocommunication software design and project management.

Master can: work with scientific and technical information, draw up analytical reviews, research reports, choose research directions; develop technical specifications and programs for research and development; develop functioning algorithms and synthesize the structures of the studied objects; create mathematical and physical models (experimental samples), carry out mathematical and physical modeling; to calculate, measure, control and evaluate the characteristics and quality of the functioning of information and communication systems and networks; assess the completeness of the solution of the tasks, the estimated competitiveness and technical and economic efficiency; monitor compliance with the requirements of international, regional, national and production standards in the field of construction of information and communication systems and networks, ensuring the quality of equipment operation, the provision of information and communication services; compose and issue scientific publications, patents, prepare reports and presentations.

The training of masters in the specialty 1-45 80 01 "Infocommunication systems and networks" is provided by the department of infocommunication technologies. The department consists of 10 specialized training laboratories in various areas of infocommunications. Masters training is provided by 10 candidates and 4 doctors of sciences.

Additional information can be obtained at the Department of Infocommunication Technologies:

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