Division: *School of Electronic Engineering and Computer Science*

Academic programme: *11.03.02 Infocommunication Technologies and Communication Systems, Digital Telecommunication Systems*

Mode of study: *full-time*

Programme length: *4 years*

Programme level: *Bachelor's degree*

Language of instruction: *Russian*

Programme description:

Graduates of this programme can build their professional career in modern digital systems, networks and means of communication (cellular, satellite, trunking communication), technologies of wireless data transmission (smart home and Internet of things) and commutation, as well as devices of information generation, conversion, reception, processing, and storage.

You will learn to:

- *Evaluate the relevance, prospects and importance of designing the communication means and networks (communication networks and switching systems, signalling networks, devices for radiocommunication, satellite and radiorelay, mobile communication, T-carrier systems, multimedia technologies, systems and devices for sound wire and on-air digital radio- and TV broadcasting, electroacoustics, information security tools, and more);*
- *Collect and analyse the source data for calculating and designing of communication facilities, intelligent information and communications networks and their elements;*
- *Calculate and design networks, facilities and means of communication in compliance with technical assignment;*
- *Develop the design and technical documentation, execute the completed design-and-engineering works;*
- *Control the compliance of the projects under development with standards and other regulatory documents;*
- *Implement the results of research and developments into production;*
- *Perform the assembly, adjustment, tuning up, regulation, operability check and commissioning of the facilities, means and equipment of the networks and organizations of communication;*
- *Test the technical state of the facilities, equipment and means of communication, and do the troubleshooting and repairs if necessary;*

- *Write operation manuals for communication facilities, networks and equipment;*
- *Participate in drawing up of patent forms and licence passports for the latest inventions;*
- *Implement and use the information systems;*
- *Ensure the protection of information and software;*
- *Bring the information and communications services to users;*
- *Control the traffic flow on the web;*
- *Draw up the applications for equipment, measuring devices and spare parts;*
- *Organize the work places and install the communication facilities, means and equipment.*

Main programme-specific classes:

- *Information Technologies*
- *Fundamentals of Building Infocommunication Systems and Networks*
- *Digital Processing of Signals*
- *Theory of Teletraffic*
- *Fundamentals of Computer-aided Design of Infocommunication Systems*
- *Radio Receivers of Radio-electronic Equipment*
- *Radio Transmitters of Radio-electronic Equipment*
- *Operation and Servicing for Facilities, Means and Equipment of Mobile Radio Communication*
- *Standards and Technologies of Mobile Communication Systems*
- *Equipment of Mobile Communication Systems*
- *Microprocessor Devices in Mobile Communication Systems*
- *Statistical Methods of Data Processing*

Programme manager: *Vladislav V. Novikov, Associate Professor of the Department of Information Communication Technology*