

# Computer Software and Hardware

National Research ITMO University

Degree or qualification is awarded: **Ph.D in Information Technologies and Computational Technics**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **3 years**

Availability of free education: **yes**

Price: **299 000 RUB per year**

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Upon completion of their Ph.D. program, graduates will be able to work in the following fields: areas of science, engineering, technology and pedagogy, covering a set of tasks destinations “Informatics and Computer Science”, including the development of the theory, design, implementation and operation of advanced computer systems, networks and systems.

The graduates will have an understanding of their chosen research fields, as well as the interdisciplinary nature of scientific problems, related to: computers, systems and networks; software, computer equipment and automated systems (programs, software and systems); mathematical, information, technical, linguistic, software, ergonomic, organizational and legal support automated information, computing, designing and controlling systems; high-performance computing and supercomputing; technologies of technical computer hardware development and software products.

The types of professional activity are: research activities in the field of potential mineral deposits research, study areas that have safe and effective industrial implementation, equipment design and development of technology for geological study, exploration, production and processing, transportation and storage of minerals, civil engineering structures, the development of complex measures for the conservation of resources and the environment; teaching activities in educational programs of higher education.

## **Specializations within this programme**

**System analysis, control and processing of information**

**Elements and devices of computational equipment and control systems**

**Automation and control of technological processes and manufacturing**

**Computing machinery, systems and networks**

**Automation design systems**

**Computational machines, complexes and computer networks**

**Theoretical fundamentals of information systems**

**Mathematical modeling, numerical methods and program complexes**