

Technical Physics

National Research ITMO University

Language of study: **Russian**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **no**

Price: **293 000 Rub per year**

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Specializations within this programme

Applied and Theoretical Physics

Program description

Implemented on the basis of ITMO University's [Faculty of Physics and Engineering](#), the program trains highly qualified specialists in the modern fields of physics. The program blends fundamental training in theoretical physics and mathematics with in-depth exploration of topical sections of modern physics such as nanophotonics, quantum optics, and radio physics. Its student-oriented approach ensures that students have extensive opportunities for choosing their individual learning tracks thanks to a wide range of elective subjects each of which is taught by lecturers possessing the highest level of expertise

Laser Photonics and Optoelectronics

Program description

The program's graduates are involved in the development of the latest laser systems, as well as the creation of new materials for the field of optoelectronics. The unique properties of laser radiation which allow for concentrating its energy in space, time and the spectral range make it indispensable in many fields: from industry to medicine and information technologies. Laser and optoelectronic technologies are indispensable for infocommunication systems, where they are used for recording, storing, transmitting and processing data. With the development of information technologies, the demand for different types of lasers continues to grow significantly. Such technologies are used both for technological and crude tasks such as cutting thick sheets of steel in the manufacturing of aircraft or cars, and for high-precision medical purposes, for example, for correcting human vision or for treating tumors.