

Informatics and Applied Mathematics

National Research ITMO University

Degree or qualification is awarded: **M.S. in Applied Mathematics and Computer Science**

Language of study: **Russian, English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **234 000 RUB per year**

Programme webpage at the university website:

http://en.ifmo.ru/en/faculty/7/Faculty_of_Informational_Technologies_and_Programming.htm

Programme curator: **ITMO International Admission Office**

Tel.:

E-mail: international@corp.ifmo.ru

Students will learn the methods of bioinformatics and the connections between the computational and experimental biology. It will help the student to form the system perspectives for the solving problems of biology and medicine. the alumnus will deeply know the research process in the modern biology, including experiment planning, its analysis, interpretation and forming tested biological hypothesis.

Specializations within this programme

Bioinformatics and Systems Biology

Currently, computational methods are widely used in biology mostly due to the fact that research inevitably comes with Big Data. Thus, one need to possess the skills to be able to work with large amounts of data and to interpret them correctly.

Benefits of the Program

- the Program is conducted in collaboration with the Bioinformatics Institute in St. Petersburg and International Laboratory “Computer Technologies” at ITMO;
- the students will work with some of the best Computer Science experts from ITMO and Biology specialists from all over the world;
- the students have an opportunity to participate in internships at major research institutions and laboratories, as well as work on projects under the guidance of leading teachers at Washington University in St. Louis, University of Nice-Sophia Antipolis, Broad Institute, Harvard Medical School, etc.

Please follow the [link](#) to find more information

Contacts

ITMO International Admission Office, international@itmo.ru

Alexey Sergushichev, Head of the Program, alserg@itmo.ru

Lada Antonova, Program Coordinator, bioinf@itmo.ru

Big Data and Machine Learning

This program teaches students to derive value from data to influence business decisions and for research purposes

using their quantitative and analytical skills.

In the framework of the program, we emphasize technical proficiency and practical experience with machine learning, database processing, data visualization and modeling, data storage, transfer and processing. The world class level and compliance with educational standards of quality assurance is proven by the growing number of the research papers published by our Masters in English in international peer-review journals and presentations of their research results at international "A" class conferences. Wide choice of courses allows our students to personalize their study track depending on their specializations.

It's a great opportunity to work hand-in-hand with researchers on the cutting-edge of Big Data and Machine Learning.

Students can choose for themselves one of three specializations: "Technologies for the organization and management of big data infrastructure", "Technologies for machine learning and analysis of big data", "Cognitive technologies and quantum intelligence".

Please follow the [link](#) to find more information

Contacts

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Mathematical and Computer Modeling

The program offers in-depth fundamental training in the field of mathematics and involves students in research and project activities since the very start of the course. The program's areas of focus include, but are not limited to: mathematical modeling of complex systems, quantum optics and quantum information science, research on magnetic nanosystems. In order to ensure the students' involvement in the international research process, part of the training is conducted in English. The students participate in international scientific conferences and international internships.

Please follow the [link](#) to find more information

Contacts

Maria Moskalenko

+7 (967) 974-9397

mamoskalenko@itmo.ru

Programming and Artificial Intelligence

The program offers advanced training in the field of programming and artificial intelligence. Most of the practical subjects are taught by leading specialists of software development companies (Yandex, Mail.ru Group, JetBrains, DevExperts and others) and the best lecturers from St. Petersburg's universities.

Among the program's students are winners of national and international contests in mathematics, IT and programming. Its graduates are highly rated amongst Russian and international companies. Students who participate in scientific research get special scholarships and win grants; their articles get published in international journals indexed by Web of Science and Scopus.

Please follow the [link](#) to find more information

Contacts

Georgiy Korneev

+7 (921) 973-4899

kgeorgiy@itmo.ru

Software Engineering

This joint corporate Master's program by ITMO University and the company JetBrains offers relevant knowledge in the

field of software development. The basic courses (algorithms, programming, machine learning, etc.) are complemented with special subjects (deep learning, image analysis, etc.) that reflect the modern approaches to solving the tasks of today's IT industry, including a course on the new rapidly developing field of algorithmic bioinformatics. The program's academic staff includes scientists and developers from St. Petersburg's major companies.

Please follow the [link](#) to find more information

Contacts

Maria Timofeeva
+7 (921) 633-2982
mse@itmo.ru