

Moscow Institute of Physics and Technology (National Research University)



Year of foundation: **1951**



Total students: **7 561** / Foreign students: **1 088**



Faculties: **12** / Departments: **130**



Teachers: **2 069**

Professors
276

Associate Professors
271

Doctors of Science
598

Candidates of Science
879

Foreign teachers
52



Main educational programmes for foreigners: **61**

Bachelor's programme
28

Master's programme
33

Specialist programme

Training of highest qualification personnel



Additional educational programs for foreigners: **4**

Pre-university training programmes

Russian as a foreign language
2

Short programmes

Other programmes
2

Moscow Institute of Physics and Technology (National Research University) (MIPT) known informally as Phystech, is a leading Russian university which trains specialists in theoretical and applied physics, applied mathematics and related disciplines. Most of its buildings are in Dolgoprudny (5 km away from Moscow). Some buildings are located in Zhukovsky (40 km away from Moscow) and in the capital itself.

MIPT's so-called "Phystech System" is a unique tradition, an educational legacy, aimed at preparing highly qualified specialists, who are worldwide demanded in key fields of science.

Pyotr Kapitsa, Nobel laureate in physics and one of the founding fathers of MIPT, in 1946 outlined the following basic

principles of the Phystech System:

- Leading scientists from key institutions (such as universities, research centers and commercial knowledge-based organization where students do research and write their theses) shall be involved in student education using the high-tech equipment of these institutions.
- Training in key institutions implies an individual approach to each student.
- Each second-third year student shall be involved in scientific work.
- Upon graduation, students shall be able to apply contemporary methods of theoretical and experimental research and possess ample engineering knowledge to efficiently meet relevant technical challenges.

Moscow Institute of Physics and Technology is organised into 6 Phystech Schools. Currently, most of the student's study within the field of study "Applied Mathematics and Physics", at the same time many are trained within "Applied Mathematics and Informatics", "Informatics and Computer Engineering", "Cyber Security", "System Analysis and Control", "Technical Physics" and "Biotechnology".

Moscow Institute of Physics and Technology – is a leading Russian technological university, as evidenced not only by achievements of its scientists and alumni, but also by high position in national and international rankings. According to Times Higher Education (THE) и Quacquarelli Symonds (QS) world university rankings, MIPT ranks first among Russian technological universities. Times Higher Education rates MIPT as one of the 50 best universities in the world in Natural Sciences and 100 best in Computer Science and holds a leading position in these areas in Russia. MIPT is also a leader of 5-100 project, aimed at consolidating the credibility of Russian higher education worldwide.

Student successes

MIPT graduates include two Nobel Prize winners, over 150 members of the Russian Academy of Sciences, including the President and Vice President of the Russian Academy of Sciences, over 6000 Doctors of Sciences, and around 17,000 Candidates of Sciences.

Famous graduates

Andre Geim

Sir Andre is a Russian, Dutch and British physicist who became a 2010 Nobel Prize Laureate in Physics. In 2011 Queen Elizabeth II issued a decree awarding him with the title of Knight Bachelor for his services to science. He was also appointed Fellow of the Royal Society of London in 2007 and Foreign Member of the US NAS in 2012.

Konstantin Novoselov

Konstantin is a Russian and British physicist. He became a 2010 Nobel Prize Laureate in Physics and was appointed Fellow of the Royal Society of London in 2007 and Foreign Member of the US NAS.

Serguei Belousov

Serguei is a businessman and a venture capitalist. He is the chairman of the board of the Parallels company, and at the same time he is the founder and CEO of Acronis.

Aleksandr Kaleri

Aleksandr is a Russian cosmonaut, who made 5 flights lasting a total of 769 days.

Mikhail Lukin	Mikhail is a Russian and American scientist in the field of theoretical and experimental physics, professor of physics at Harvard University. He is included in the list of the most cited scientists in the world and his h-index is 125.
Ratmir Timashev	Ratimir is a Russian businessman, the founder of Aelita Software, the founder and president of Veelam Software co-founder of the ABRT Venture Fund and was one of top-30 leading Russian IT-businessmen by Forbes.
Aleksandr Serebrov	Aleksandr is a Soviet cosmonaut. A hero of the USSR. He had been a record holder (up to 1997) for totalling more than 56 hours of flying time on board the Mir station and for the number of extra-vehicular activities (10 times).
Nikolay Storonsky	Nikolay is a prominent businessman, CEO and the founder of Revolut, which is UK's most valuable fintech startup.
Vladimir Fortov	Vladimir is a Soviet and Russian physicist, academician of the Russian Academy of Sciences (since 1991) and its former president (May 29, 2013 - March 23, 2017).
Mohammad Mehdi Tehranchi	Mohammad is a modern Iranian theoretical physicist, academician, scientist, professor emeritus of the Shahid Beheshti University, advisor to the head of the Center for Strategic Research of the Scientific and Technological Research Expediency Council and President of the Azad Islamic University
David Yang	David is the founder and member of the board of directors of the ABBYY group of companies. He holds Doctoral degree in Physics and Mathematics. David is also known as laureate of the Russian Government Prize in Science and Technology, restaurateur, innovator and a member of the Supervisory Board of MIPT as well.
Eldar Akhmetgaliev	Eldar is the founder of a MOCAP Analytics startup, which is now one of the best in the world in data processing based on machine learning. He works in the US Silicon Valley.
Fr. Mesrop Aramian	Fr. Mesrop is an Adviser to the President of the Republic of Armenia on Education, the founder and editor-in-chief of Vem spiritual and cultural radio station and co-founder (together with Phystech graduates of different years D. Yan, A. and D. Pakhchanyans) of the Ayb educational foundation.
Aram Pakhchanyan	Aram is a Vice President of the ABBYY Group of Companies and co-founder of Ayb Educational Foundation and Ayb School where he holds a position as a director. Aram was twice included in the rating of "Top-100 Russian Managers" by AMR and "Kommersant".

Tigran Shahverdyan

international olympiads in physics and astronomy. He is well-known as a co-owner and executive director of RoboCV company, which is a resident of the Skolkovo Foundation.

Stanislav Protasov

Stanislav is a co-founder and senior vice president of software design and development at Acronis. He holds a Doctoral degree in physics and mathematics as well as 71 international patents. Stanislav is a co-author of container technology and one of the top CIOs by Kommersant.

Positions in international ratings

YEAR	RATING	POSITION
2021	U.S. News	385
2021	QS Chemistry	351-400
2021	QS Biological Sciences	301-350
2021	QS Materials Sciences	301-350
2021	THE Life Sciences	251-300
2021	QS Engineering - Electrical & Electronic	251-300
2021	U.S. News Biology and Biochemistry	270
2021	QS Engineering - Mechanical	201-250
2021	U.S. News Space Science	200
2021	QS Engineering & Technology	186
2021	U.S. News Mathematics	171
2021	QS Computer Science and Information Systems	151-200
2021	QS Mathematics	92
2021	THE Computer Science	91

YEAR	RATING	POSITION
2021	QS Natural Sciences	66
2021	QS Physics & Astronomy	50
2021	THE Physical Sciences	47
2021	U.S. News Physics	40
2021	ARWU	401-500
2021	QS University Ranking	281
2021	THE World University Ranking	201-250
2020	U.S. News Biology and Biochemistry	270
2020	QS Mechanical, Aeronautical & Manufacturing	201-250
2020	QS Materials Sciences	251-300
2020	U.S. News Space Science	200
2020	QS Computer Science	151-200
2020	U.S. News Mathematics	171
2020	QS Mathematics	101-150
2020	QS Physics & Astronomy	51-100
2020	QS Natural Sciences	67
2020	THE Physical Sciences	45
2020	U.S. News Physics	40
2020	THE World University Ranking	201-250

YEAR	RATING	POSITION
2020	QS University Ranking	302
2020	ARWU	401-500
2020	THE Computer Science	91
2020	THE Engineering and Technology	301-400
2019	QS Physics & Astronomy	51-100
2019	QS Natural Science	111
2019	QS Mathematics	101-150
2019	QS Engineering & Technology	185
2019	QS Electrical & Electronic	201-250
2019	QS Materials Sciences	251-300
2019	QS Mechanical, Aeronautical & Manufacturing	201-250
2019	QS Computer Science	201-250
2019	QS Chemistry	401-450
2019	ARWU Physics	151-200
2019	ARWU Mathematics	401-500
2019	ARWU Materials Science & Engineering	401-500
2018	ARWU 2018	401-500
2018	THE Golden Age	32
2018	QS World University Rankings 2018	312

YEAR	RATING	POSITION
2018	THE Emerging Economies University Rankings 2018	11
2018	QS Natural Sciences 2018	106
2018	QS Engineering & Technology 2018	236
2018	QS World University Rankings BRICS 2018	28
2018	QS Graduate Employability Ranking 2018	301
2018	QS EECA University Rankings 2018	13
2018	QS University Rankings 2017/18	355
2018	THE Computer Science 2018	67
2018	THE Physical sciences 2018	48
2018	THE Engineering & technology 2018	251-300
2018	THE World University Rankings 2018	251-300
2017	ARWU Materials Science & Engineering - 2017	401-500
2017	ARWU Physics - 2017	201-300
2017	ARWU Mathematics - 2017	401-500
2017	QS Natural Sciences	135
2017	QS Engineering & Technology	322
2017	QS Mathematics	151-200
2017	QS Physics & Astronomy	42
2017	QS Engineering - Mechanical, Aeronautical & Manufacturing	201-250

YEAR	RATING	POSITION
2017	QS Chemistry	401-450
2017	QS Engineering - Electrical & Electronic	201-250
2017	QS Computer Science & Information Systems	251-300
2017	THE Physical Sciences 2016-2017	78
2017	THE BRICS & Emerging Economies Rankings 2017	12
2017	The World's Most International Universities	126
2016	THE World Reputation Ranking-2016	91-100
2016	THE BRICS University Ranking	93
2016	QS BRICS University Ranking	47
2016	QS World University Rankings by Faculty 2015 - Natural Science	316
2016	QS World University Rankings by Subject 2016 - Physics & Astronomy	101-150
2016	QS World University Rankings by Subject 2016 - Engineering - Mechanical, Aeronautical & Manufacturing	201-300
2016	QS World University Rankings by Subject 2016 - Engineering - Electrical & Electronic	251-300
2016	QS World University Rankings by Subject 2016 - Computer Science & Information Systems	351-400
2016	QS World University Rankings® 2016-2017	350
2016	THE 2016-2017 (THE World University Rankings by subject 2016-2017)	78
2015	THE BRICS University Ranking	69
2015	QS Emerging Europe & Central Asia University Ranking	10
2015	QS BRICS University Ranking	45

YEAR	RATING	POSITION
2014	THE BRICS University Ranking	69
2014	QS Emerging Europe & Central Asia University Ranking	17
2014	QS BRICS University Ranking	52
2013	100 Best Universities in the World in Physics	63

Positions in Russian ratings

YEAR	RATING	POSITION
2021	The Three University Missions	46
2020	The Three University Missions	46
2019	Forbes Russia	3
2019	Interfax	3
2019	Expert RA (RAEX)	2
2018	Interfax National Universities Ranking	3
2018	Forbes University Ranking	3
2018	Expert RA Russian Universities Ranking	2
2017	Interfax National Universities Rankings	6
2017	Expert RA Russian Universities Ranking	2
2016	Interfax National Universities Ranking by parameter "Research"	3
2016	Interfax National Universities Ranking	4

YEAR	RATING	POSITION
2016	RAEX (Expert RA) Universities in the enlarged areas Reputation Ranking in the field of "Information technology"	3
2016	RAEX (Expert RA) Universities in the enlarged areas Reputation Ranking in the field of "Mathematics and Natural Sciences"	4
2016	RAEX (Expert RA) Universities in the enlarged areas Reputation Ranking in the field of "Technical Sciences, Engineering and Technology"	4
2016	RAEX (Expert RA) Universities in the enlarged areas Reputation Ranking in the field of "Technical, Natural and Exact Sciences"	3
2016	RAEX (Expert RA) Russian Universities Ranking by scientific and research activities	3
2016	RAEX (Expert RA) Russian Universities Ranking by demand of graduates by employers	3
2016	RAEX (Expert RA) Russian Universities Ranking by conditions for obtaining quality education	3
2016	RAEX (Expert RA) Russian Universities Ranking	2
2015	Expert RA Russian Universities Ranking	2
2015	Interfax National University Rankings	3
2014	Expert RA Russian Universities Ranking	2
2014	Interfax National University Rankings	4
2012	Best Russian Technical University by Quality of Applicants Admitted	1

International partnership

Being the leading Russian university in the sphere of science and technology, MIPT has a wide range of partners among top-ranked universities, research centers and scientific institutes around the world. Global collaborations with universally recognized institutions develop and facilitate academic mobility, scientific projects, and international research grants. MIPT is active and an irreplaceable member of main academic collaborations and mega-science experiments. Every year MIPT students and staff contribute much to solving global problems and innovating for the future.

Synergy of fundamental knowledge and integration in science let MIPT young scientists and students unleash their potential in working in different world centers like Google, Vivo Participacoes S.A., CERN, DEZY, ETH, EPFL, Facebook.

- Swiss Federal Institute of Technology (ETH Zurich) - Zurich, Switzerland

- the European Organization for Nuclear – Geneva, Switzerland
- Research Forschungszentrum Jülich GmbH – Jülich, Germany
- The High Energy Accelerator Research – Tsukuba, Japan
- Organization - Huawei Technologies – Shenzhen, China
- University of Stuttgart – Stuttgart, Germany
- University of California – Oakland, USA
- Beihang University – Beijing, China
- Royal Holloway and Bedford College, University of London – London, England
- Deutsches Elektronen-Synchrotron (DESY) – Hamburg, Germany

MIPT is the most attractive start -up in Russia for building future professional careers in the sphere of science and technology, offering different programs of academic mobility. Students have the wide range of opportunities such as:

- Internships in modern and highly equipped laboratories on campus and abroad
- Double degree and joint networking programs with the leading partner universities
- Cotutelle programs for Doctoral degree students. This very program of joint supervision of Doctoral degree students scientific research with such universities as Grenoble Alps University or University of Groningen allows the students to gain the Degree both in Russian and from an Foreign Institute.

- École Polytechnique – Paris, France
- Tsinghua University – Beijing, China
- Grenoble Alps University – Grenoble, France
- University of Twente – Enschede, Netherlands
- University of Groningen – Groningen, Netherlands
- Georgia Tech (Georgia Institute of Technology) – Atlanta, USA
- Tel-Aviv University – Tel-Aviv, Israel
- Tohoku University – Sendai, Japan
- Sharif University of Technology – Tehran, Iran
- Beihang University – Beijing, China
- Harbin Institute of Technology – Harbin, China

Being focused on talented and highly motivated foreign perspective students, MIPT develops the cooperation with both CIS and NON-CIS schools with the profound study of physics and mathematics and centers of talented and distinguished children. In 2021, Moscow Institute of Physics and Technology concluded the agreement of cooperation with Distinction and Creativity Center (Syria) in order to facilitate Agency’s graduates’ interest in Bachelor, Master and Doctoral degree programs in MIPT.

Preparatory department for foreign applicants

Preparatory department for Bachelor's programme

The Preparatory Course for Foreign Citizens of MIPT is resuming its annual work on October 5th. Its participants receive education under the «University preparation Program For Foreign Citizens».

Through this course, international students obtain key Russian language skills in three types of communication: scientific, formal, and informal. In addition, the Preparatory Course for Foreign Citizens holds extra-curricular events on social and cultural adaptation for international first-year students.

But it is not only the acquaintance with the Russian language that is the area of activity of the Preparatory Course for Foreign Citizens of MIPT. Its participants also acquire the relevant knowledge in key subjects, depending on their major of choice. Teachers from different departments of MIPT introduce core disciplines to international students prior to the completion of the Russian language course.

One may choose between the two specializations:

- Engineering and technology;
- Natural science.

The teaching staff of the course is the teaching staff of the MIPT departments of: higher mathematics, general physics,

informatics and computer technology, chemistry and also foreign languages.

For international students, they seek to bring about a learning atmosphere the most propitious, allowing them to undergo the period of adaptation fruitfully.

Preparatory department for Master's programme

The programme and tuition fee are the same as for the preparatory course for undergraduate students.

Support of foreign students

International student support and guidance is the responsibility of the International Office of MIPT (i.e. Adaptation Office).

Everyday life of foreign students

There is a modern complex of student dormitories on the territory of the MIPT campus in Dolgoprudny with all comforts. It is particularly noteworthy that the campus is located just several minutes away from laboratories and lecture halls. Students are provided with Internet access, there are rooms for rest and study, gyms, recreational areas and a clinic within the territory. The accommodation fees range from 1200 to 1400 rubles depending on the selected package of services. MIPT also owns a sanatorium on the bank of the Pestovo pond.

Leisure and sport events

Students interested in sport may put their time to good use at the MIPT stadium, in the swimming pool, on the tennis courts and volleyball and basketball playgrounds. Volleyball, basketball, tennis and futsal training are carried out in gyms with relevant equipment and markings. For students who are keen on winter sport, we have ice rinks, and in winter we provide ski skates for rent.

For those who have a stake in extraordinary sports, MIPT offers many options such as chess, yacht clubs, "Barrier" caving club, rock climbing section, Sub Aqua Club, martial arts and boxing.

Cultural activities like student festivals, concerts, rehearsals of a variety of artistic groups are regularly arranged in the PhysTech concert hall and campus clubs. Art and photo exhibitions decorate the campus and student dorms. And as a big advantage, international students annually conducted their traditional national fairs so that anyone could learn a lot about foreign cultures in person.

Additional information

Academic Staff

Alexey Abrikosov	Nobel Prize winner (2003). His main discoveries were made in the sphere of physics of condensed media.
Vitaly Ginsburg	Nobel Prize winner (2003). Author of the quantum theory of the Vavilov-Cherenkov effect and Cherenkov radiation theory.
Pyotr Kapitsa	Nobel Prize winner (1978). Discovered the superfluidity of fluid helium phenomenon.

Lev Landau	Founder of an academic school, author of the fundamental textbook Course in Theoretical Physics. Nobel Prize winner (1962), awarded for breakthrough research on liquid helium.
Alexander Prokhorov	Nobel Prize winner (1964). Conducted pioneering research in quantum electronics; one of the inventors of laser technologies.
Andrei Sakharov	Nobel Prize winner (1975). Took part in creating the first Soviet hydrogen bomb. Human rights activist and public figure.
Igor Tamm	Nobel Prize Winner (1958). Developed a method of quantum field theory solution, the Tamm-Dankov method, jointly with Andrey Sakharov developed plasma retention principles.
Nikolay Semenov	The only Soviet Nobel Prize winner in Chemistry (1956). Basic scientific achievements include the quantitative theory of chemical chain reactions, theory of thermal explosion and gaseous mixture combustion.

Contacts

9 Institutskiy per., Dolgoprudny, Moscow Region, 141700, Russian Federation

<https://eng.mipt.ru/>

International Admission Office

+7 (498) 713-91-70

(09:00 - 18:00 (UTC+3) MSK)

interadmission@phystech.edu