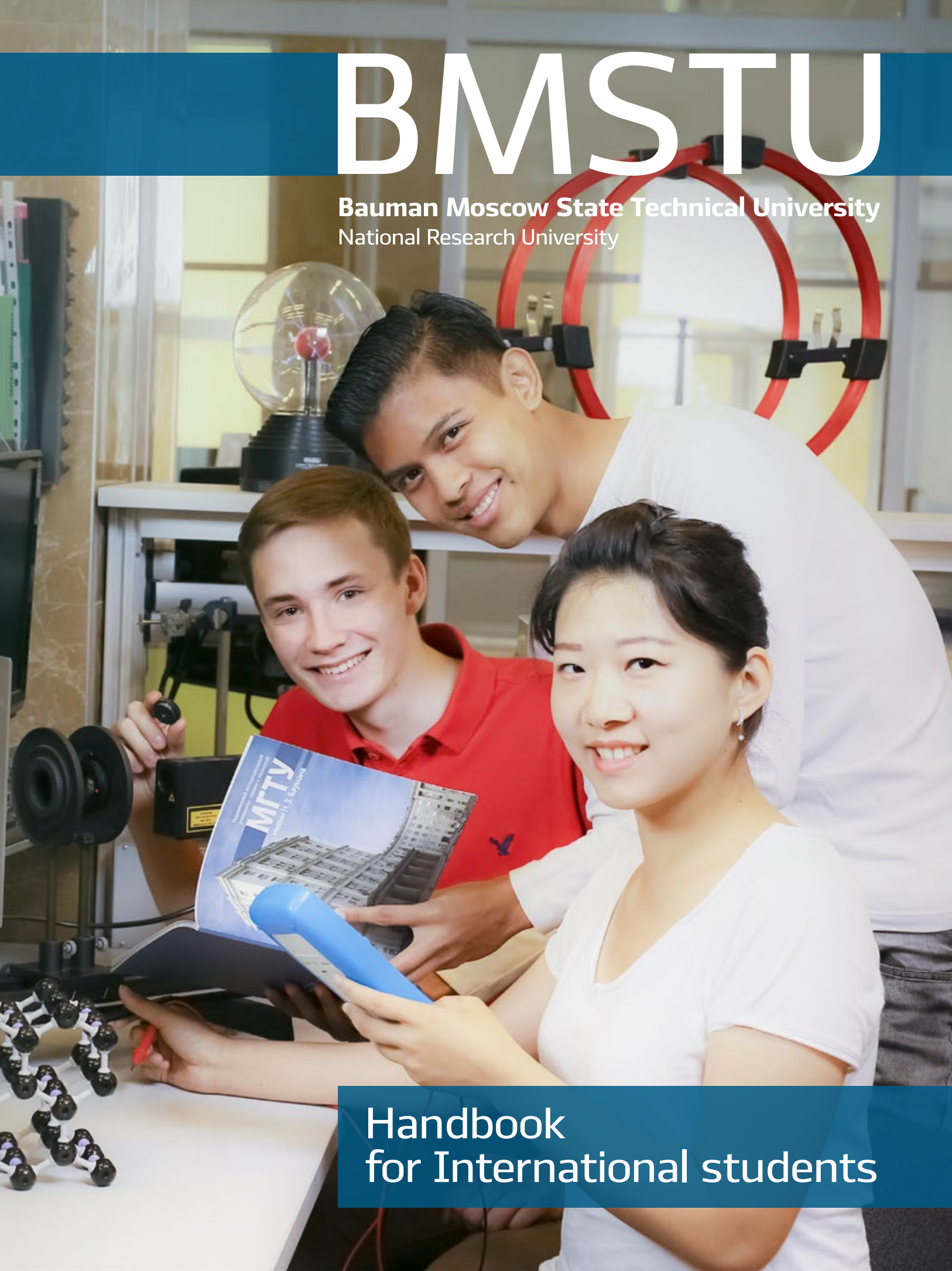
BMSTU

Bauman Moscow State Technical University

National Research University



Handbook for International students

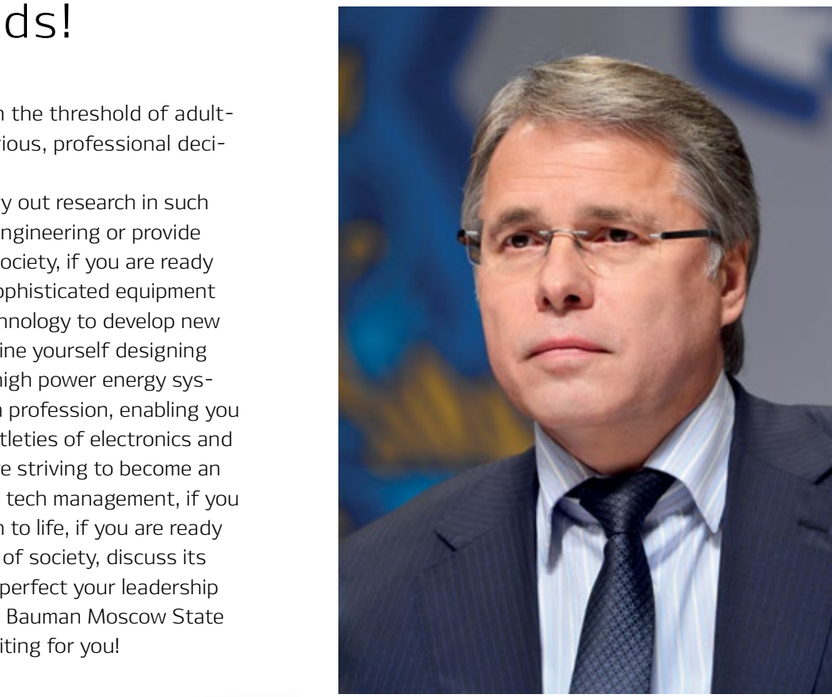
Faculties and Departments

Main Educational Programs and Additional Education

Dear friends!

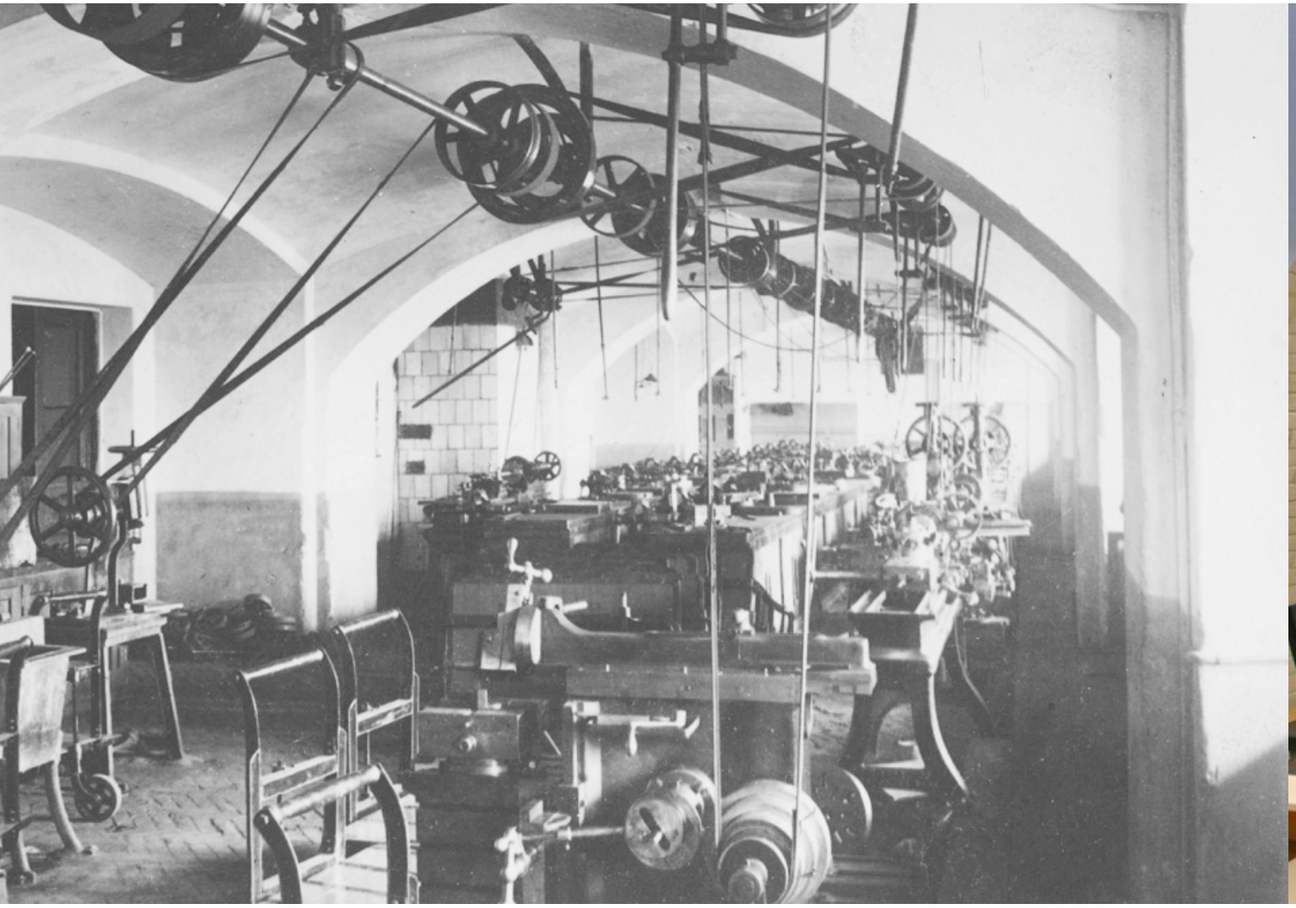
You, who are standing on the threshold of adulthood, have to make a serious, professional decision about your future.

If your dream is to carry out research in such promising fields as nanoengineering or provide information security for society, if you are ready to become proficient in sophisticated equipment and state-of-the-art technology to develop new materials, if you can imagine yourself designing spacecraft, aircraft, and high power energy systems, if you want to get a profession, enabling you to understand all the subtleties of electronics and microelectronics, if you are striving to become an expert in the field of high tech management, if you have a proactive approach to life, if you are ready to think about the future of society, discuss its past and present, and to perfect your leadership and teamwork skills, then Bauman Moscow State Technical University is waiting for you!



BMSTU Rector

Anatoly A. Alexandrov



From School to University

History

The history of Bauman University began on July 1, 1830, when the Russian Emperor Nicholas I approved «Regulation on trade and educational institutions» and allocated one of his residences, Sloboda Palace, for his students, which had been renovated by the famous architect Gilardi.

Education within the Sloboda walls was based upon the principle of a combination of theoretical knowledge and practical training. It subsequently formed the foundation of the “Russian method of apprenticeship”, which became widely known and accepted in many universities around the world.»

Since its inception, Bauman Moscow State Technical University has trained more than 200,000 professionals, who have largely defined the face of Russian engineering. The names of Bauman graduates have an honorable place among the creators of the entire Russian arsenal of military equipment, aircraft and missiles. Furthermore, the first Soviet computer was created at Bauman University. In addition, Bauman graduates have gone on to become prominent scientists and academicians.

V.G. Shukhov, A.N. Tupolev, P.O. Sukhoi, S.P. Korolev, N.A. Dollezhal, S.A. Lavochkin, V.P. Barmin, A.M. Bochvar, and many others, created the entire branches of science and industry in Russia. The department «Theoretical Mechanics» was organized and headed for 48 years by the father of Russian Aviation N.E. Zhukovsky.

BMSTU has founded 16 higher education institutions, including Moscow Aviation Institute, Moscow Power Engineering Institute, Moscow State University of Civil Engineering, and 8 research institutes.

186 Years of Great History

Today

Today BMSTU , a National Research University of Engineering and Technology, is one of the three leading universities in Russia and is ranked number one among Russian technical universities. According to surveys among employers, BMSTU is one of the three institutions of higher education whose graduates are particularly in high demand in the labor market. Readers of the portal «Expert», when asked to name the institution they considered to be of most national pride, chose Bauman University.

The Board of Trustees of the Bauman University consists of prominent political and public figures, members of the Russian government, leading scientists and businessmen.

BMSTU is one of the founders of the fund «Skolkovo». Rector Anatoly Alexandrov is a member of the fund’s council;

The President of BMSTU, Academician Igor Fedorov, is a member of its Scientific Advisory Board. The University provides residents of «Skolkovo» access to its research and engineering centers.

The University is included in the state’s list of most valuable objects of cultural heritage for the peoples of the Russian Federation.

Education

BMSTU is a scientific and educational center, which implements the integration of education and science in order to prepare highly qualified specialists, who are able to perform at the highest level of development in the fields of modern technology, high-tech industries, and are also knowledgeable in the fields of economics, management, business, civil rights, and foreign languages.

20,000 students and 2,000 graduate students study in the 19 faculties.

Scientific and academic work is carried out by 700 Dr. habil. and 2,500 PhDs.

The decree of the President of the Russian Federation from July 1, 2009 gives BMSTU the right to teach according to its own educational standards.

One important feature of the educational process at the University is to encourage undergraduate and graduate students to perform real research, as well as design and develop technology.

The University is comprised of eight scientific and educational facilities, 116 departments, 10 research institutes, and 30 specialized research and education centers. A number of departments at BMSTU are led by the heads of leading Russian industrial enterprises, among them: correspondent member of the Russian Academy of Sciences and President of the S.P. Korolev Rocket and Space Corporation « Energia «, Vitaly Lopota; Academician for the Russian Academy of Sciences and Director General of the FSUE «VIAM», Eugene Kablov; and corresponding member of the Russian Academy of Sciences and Director General of the JSC «NIKIET», Yuri Dragunov.

The University implements over one hundred educational training programs for specialists, bachelors, masters and PhD students.

Faculties and centers of education and science

Engineering Business & Management

Computer Science and Control Systems

Biomedical Engineering

Electronics and Laser Technology

Robotics and Complex Automation

Mechanical Engineering

Power Engineering

Mechanical Engineering Technologies

Fundamental Sciences

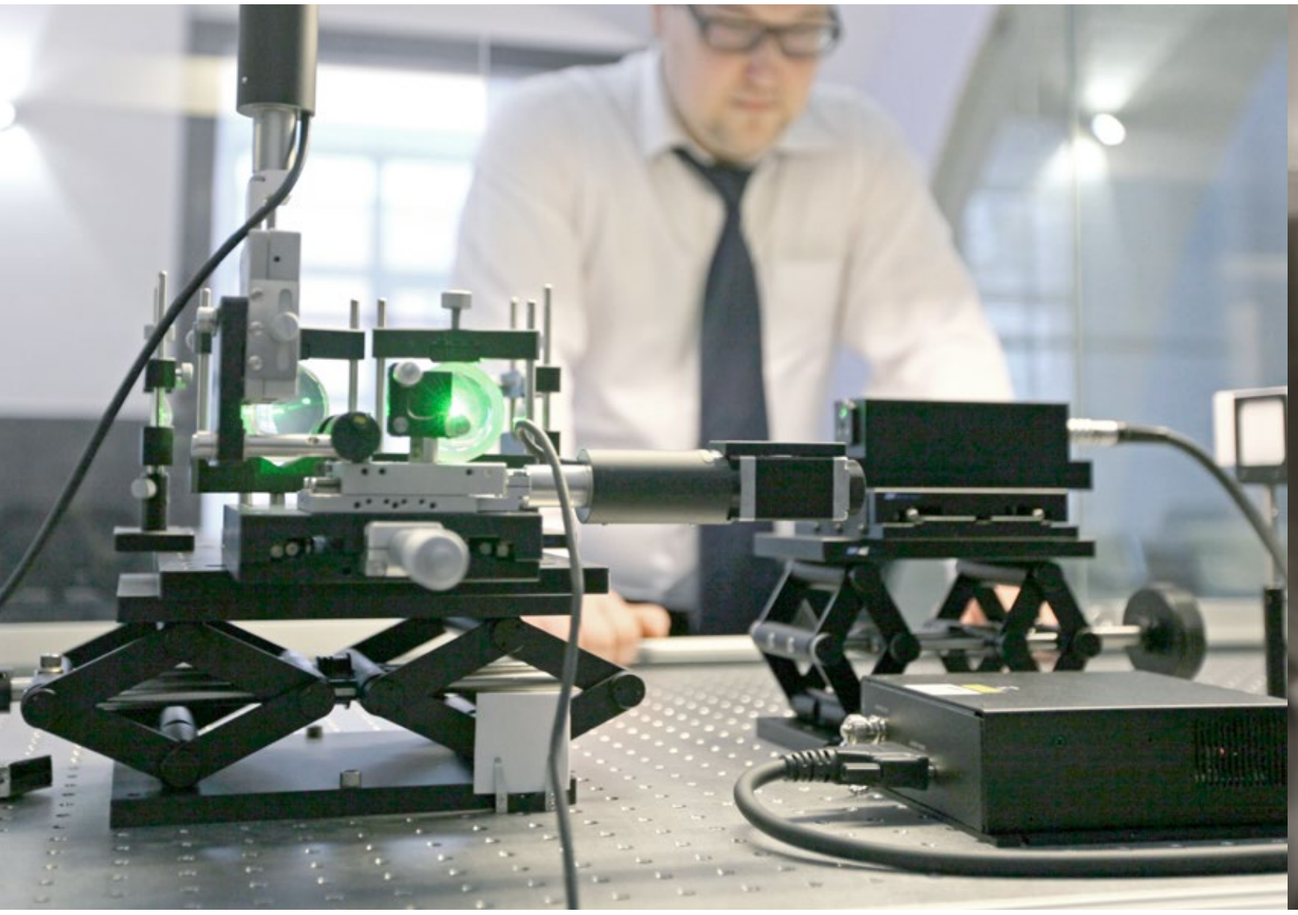
The Faculty of International Educational Programs

Department of Law, Intellectual Property and Legal Expertise

Branches

BMSTU Kaluga Branch

BMSTU Mytischi Branch



Research

At the University, active research is conducted in the most promising fields, from nanotechnology to space engineering. The resulting technologies have been introduced and implemented in the space, defense, medical, and IT industries, as well as others.

Since 2011, interdisciplinary engineering centers created at the University have been conducting technology-oriented research. Groups from the centers perform complete cycles of operations – from basic research to practical production and introduction of new technologies.

In 2012, the following research and education centers were created: «Nanotechnology, Nano-and Microsystems», «Photonics and Infrared Technology», «New Materials, Composites and Nanotechnology» and «Ion-Plasma Research.» The total amount of R & D performed in them exceeds 1.5 billion rubles. Undergraduate and graduate students participated in these centers, as well as other research groups at the University.

32 major Russian corporations included BMSTU in their innovation development programs. Among them – JSC «Transneft», JSC «Gazprom», SC «Rosatom», JSC «Rusnano», JSC «RSC-Energia, JSC «Almaz-Antey» and others. Based on the amount of its research grants (over 6 billion rubles), BMSTU ranks 1st among Russian universities.

Youth science

Student science at BMSTU has long outgrown the format of simply fulfilling planned coursework. The student design office, youth centers and teams, both independently and under the guidance of Bauman scientists, are working to create their own robots, space satellites, race cars and much more. With their inventions, students successfully participate in international competitions and exhibitions.

The Youth Space Center team from BMSTU was the winner of the Grand Prix in 2012 at the International Astronomical Congress in South Africa. Students are trained and participate in international summer camps at NASA. The Student Design Bureau «Gidronavtika» is one of the three Russian teams who have been invited to attend a major international student competition for underwater robots in the United States.

The Council of Young Scientists and the Zhukovsky Students' Scientific and Technical Society are both active at the University. The most successful students receive scholarships from the President and the Government of the Russian Federation, as well as scholarships and grants from the Academic Council of the University and from other various funds.

In order to support the innovative activities of young scientists and graduate students at BMSTU, the University is running a special integration system. Its results have been the creation of 18 small innovative enterprises. In three years, their total turnover has exceeded 250 million rubles. (including 130 million rubles in 2012). Four companies received resident status at «Skolkovo», the scientific and technological innovation center for the development and commercialization of new technologies, a counterpart of the American Silicon Valley.

International cooperation

www.inter.bmstu.ru
8 499 263 66 73
mobility@bmstu.ru

International collaboration is both a strategic and rapidly developing field at the University. Interaction with foreign partners includes international cooperation with more than eighty-leading universities around the world, the exchange of students and young professionals, and the participation of Bauman scientists on major international projects.

In the Program of the Development of BMSTU for 2009-2018, the following priority areas of development (NDP) of the University were identified, where the University has significant educational and technological advances:

- Space technology;
- Biomedical engineering and technology of living systems;
- Nanoengineering;
- Energy and Energy Efficiency;
- Information and communication technologies;
- Weapons, military and special equipment, systems to counter terrorism.

The major international activities of BMSTU are:

- Educating international students, graduate students and trainees;
- Implementing scientific and technical contracts;
- Teaching undergraduate and graduate students of BMSTU in foreign universities;
- Collaborating with foreign universities and companies, and participating in international associations.

Every year, professors and researchers at BMSTU are contracted to support foreign universities and firms educational/methodical and scientific/technological developments.

The University participates in the following European Commission programs: TEMPUS, INTAS, INCO-COPERNICUS, ERASMUS MUNDUS, and ERASMUS MUNDUS EXTERNAL COOPERATION WINDOW.

The university receives annual grants from the funds of foreign countries such as Germany, Britain, France, Italy, etc. for educational/methodological development and scientific research.

Most of the University's activities are carried out through collaboration with foreign universities. Most of the long-term collaborations have been established with universities in France, the UK, Germany, Italy, the Netherlands, the USA, Switzerland, Sweden, Spain, Vietnam and China. The main types of collaboration include the exchange of undergraduate students, graduate students, trainees, teachers and researchers, the implementation of joint educational and scientific/technological developments, and joint work to implement projects under the program of the European Commission, as well as national and international programs.

BMSTU also contributes to the Bologna process. The University was among the first to introduce the two-stage system of education (bachelor-master). In recent years, there has been a significant increase in academic mobility of students and graduate students, resulting in active cooperation with foreign universities in the field of education.

Together with leading technical universities in several European countries, the International Relations Office prepares documents to demonstrate the university's equivalent curriculum and programs, in order to for them to be accepted by other European universities.

Students and graduates of the University are involved in programs of academic mobility, in internships at the enterprises of leading western companies, and attend international conferences, symposia and scientific competitions.

Academic Mobility

Bilateral agreements on academic mobility programs have been signed with universities in France, Germany, Italy, Spain, Switzerland, Finland, the Netherlands, the USA and the UK.

Since 1998, Bauman students have had the option to participate in the dual degree program "TIME", which was implemented by the Association of Technical Universities in Europe, Russia, Brazil, Japan and China. Upon completion of training, participants receive a diploma from BMSTU, as well as a degree from the foreign university where they had studied for 1–2 years. Along with BMSTU, more than 50 universities from 19 countries in Western Europe and Russia make up the association. Acceptance of BMSTU into the Association "TIME" is an international recognition of the University's diploma, as well as an open door to additional opportunities for more active Φ in many areas with European universities.

The most active cooperation so far has been with the leading engineering schools in France – Ecoles Centrales in Paris, Lyon, Lille, Nantes and Marseille.

Infrastructure

The size of the University is comparable to the size of a small city. In addition to its six main buildings along the Yauza river in the center of Moscow, BMSTU includes a branch in the city of Kaluga, its own experimental facilities in Dmitrov, a specialized robot center, several independent laboratories, and a sports complex, complete with a swimming pool, arena, playing fields, a climbing wall, and recreation centers.

The University supports students' daily lives by providing security service, cafeterias, a pilot plant, a publishing house and a health center.

International students and students from other cities in Russia live in 10 dormitories, which have a total area of more than 9000 square meters.

The main building of BMSTU is the Slobodskoy Palace - a landmark building. On its territory there are more than 100 unique historical artifacts, as well as many valuable items, which are carefully preserved in the University's museum.

Most classrooms are equipped with modern multimedia equipment.

The Center for Health and psychological relief of students is located in the Lecture hall of Research and Education Center.

A classroom of Scientific and Educational Center

Student Life

Students' social and public activities are an integral part of life at the University. Every week, within the confines of Bauman University, there are activities organized by different student associations – from the young scientists' club and lovers of philosophy to the KVN team (Club of Funny and Inventive) and chamber choir. A wide range of groups and activities allows every undergraduate or graduate student to find something of interest, whether it's sport, culture, social activities, or the study of foreign languages.

The largest organizations – Student Council and Student Trade Union unite more than 70% of the students and are capable of influencing the work of the entire University. One of the main areas of activity is to protect the rights and interests of students.

Specifically for the first-year students, Student Council organizes a series of activities which help them quickly adapt to college life and get acquainted with the University and fellow students.

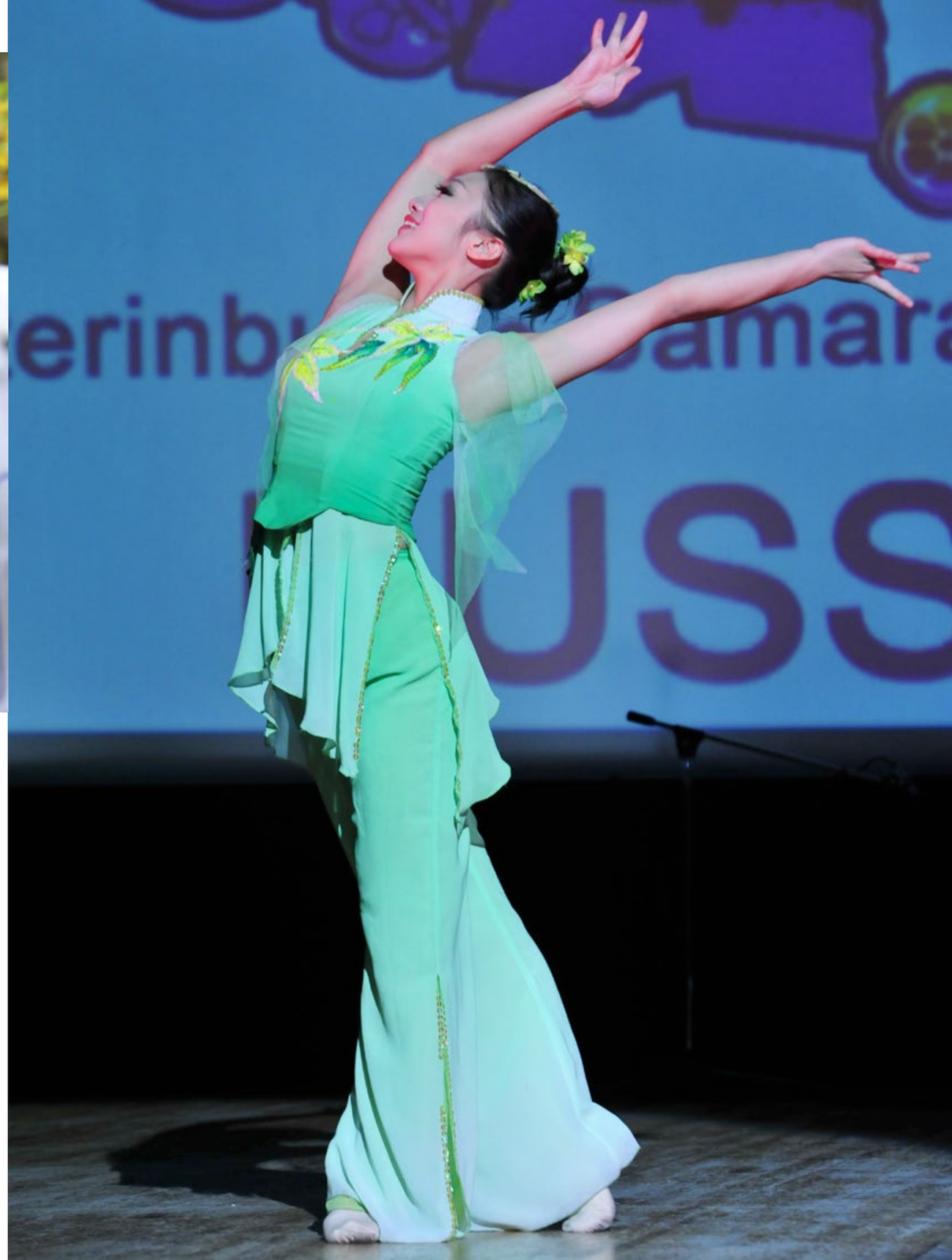
Since 2012, in accordance with the decision of the Government of the Russian Federation, students who take an active part in the social, cultural and athletic life of the University may qualify for increased government scholarships.

Culture and Sport

The University's Sport Complex provides students with the opportunity to choose between 36 different kinds of sports. A fifty-meter swimming pool, an athletics area and sport halls are all available for use. BMSTU climbing wall is considered one of the best in Moscow. Sporting grounds with a special covering allow for year-round outdoor football.

On the sites of dormitories № 11 and № 4, student health centers have been established, equipped with modern exercise equipment, as well as cabinets for psychological relief and rehabilitation.

The presidents of Russia and France have spoken from the stage of the Great Hall in the Palace of Culture Bauman, where prominent public and political figures, popular modern bands and artists have also been honored. Within these walls, almost all genres of student initiative are developing. Among the groups of the Palace of Culture are the world famous chamber choir «Gaudeamus» and Neapolitan ensemble. Every student who wants to develop their artistic talents has the opportunity to become a part of the creative process, and perhaps honor Bauman Moscow State Technical University with their achievements as well.



The Faculty of Computer Science and Control Systems

iu.bmstu.ru
8 (499) 263 61 05*
8 (499) 263 62 16*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The faculty optimally combines research and educational processes. Our partners include the largest Russian and foreign manufacturers of software and computer equipment. The specialists working at the faculty regularly participate in exchange programs, research and lecture at leading universities throughout the world.

In 2013–2014, Cisco named BMSTU a partner-university, whose graduates are invited to a one-year internship in the company's head office in the United States.

Mail.Ru Tech Park, a center of research and education, opened in 2014, forms an integral part of the research complex of Computer Science and Control Systems.

Areas of research include: information and communications technology, intelligent control systems, high-precision navigation systems, information processing, computer and information security of automated systems, nanotechnology, theoretical computer science, software engineering, computer systems and networks.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
CS1	Automatic Control Systems	Specialist Bachelor	24.05.06 27.03.04	Aircraft Control Systems Control in Engineering systems
CS2	Orientation, Navigation and Stabilization	Specialist	24.05.06	Aircraft Control Systems
CS3	Information Systems and Telecommunications	Bachelor	09.03.02	Information Systems and Technology
CS4	Design and Production Technology of Electronic Equipment	Bachelor	11.03.03	Design and technology of electronic equipment
CS5	Automated Systems of Information Processing and Control	Bachelor	09.03.01	Computer Science and Engineering
CS6	Computer Systems and Networks	Bachelor Bachelor	09.03.01 09.03.03	Computer Science and Engineering Applied Informatics (fee-based)
CS7	Software and Information Technology	Bachelor	09.03.01	Software Engineering
CS9	Theoretical Informatics and Computer Technologies	Bachelor	01.03.02	Applied Mathematics and Computer Science

You can learn more about Master programs on page 38

* the telephone number is available during the admission campaign

The Faculty of Engineering Business & Management

ibm.bmstu.ru
8 (499) 263 62 58*
8 (499) 267 02 28*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The Faculty of Engineering Business and Management was founded in 1993. An important feature of its program is to offer a combination of fundamental university engineering and humanitarian (including languages) training, with fundamental training in economics and management.

The faculty developed and continues to develop its supplementary education program, which offers students an opportunity to complete a second, higher education degree and MBA.

In 2011, the Department of the Faculty organized a scientific and educational center of innovative entrepreneurship. In 2014 BMSTU established several engineering competence centers for the development of student start-ups.

Areas of research activity: strategic consulting and engineering services for industrial plants, innovations, and management of science-based industries.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
EBM1	Economic Theory	Bachelor	38.03.01 38.03.02	Economics (fee-based) Management (fee-based)
EBM2	Economics and Manufacturing Process Management	Bachelor	27.03.05	Innovation
EBM3	Industrial Logistics	Bachelor	38.03.02 27.03.05	Management (fee-based) Innovation
EBM4	Management	Bachelor Bachelor	27.03.05 38.03.02	Innovation Management (fee-based)
EBM5	Finances	Bachelor	38.03.01 38.03.02 27.03.05	Economics (fee-based) Management (fee-based) Innovation
EBM6	Entrepreneurship and International Economic Activity	Bachelor	38.03.02 38.03.05 27.03.05	Management (fee-based) Business Informatics (fee-based) Innovation
EBM7	Innovative Entrepreneurship	Bachelor	38.03.02 27.03.05	Management (fee-based) Innovation

You can learn more about Master programs on page 38

* the telephone number is available during the admission campaign

The Faculty of Biomedical Engineering

www.rlm.bmstu.ru
8 (499) 263 64 50*
8 (499) 263 67 73*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The faculty Biomedical engineering is the first faculty in Russia to teach bioengineering. The features of education at the faculty include a comprehensive study of engineering and biomedical disciplines both within BMSTU, as well as at large enterprises and clinics, including Pirogov Hospital, Research Institute of Test Medical Equipment, Sechenov Medical University, Burdenko Hospital.

Fields of research include: medical equipment for the treatment of various diseases, including cardiovascular disease and cancer, the means of remote monitoring of vital parameters of the human body, control systems and tracking, bio-renewable materials and living systems.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
BE1	Biomedical Engineering Systems	Bachelor	12.03.04	Biotechnical Systems and Technologies
BE2	Medical Engineering Information Technologies	Bachelor	12.03.04	Biotechnical Systems and Technologies

You can learn more about Master programs on page 38

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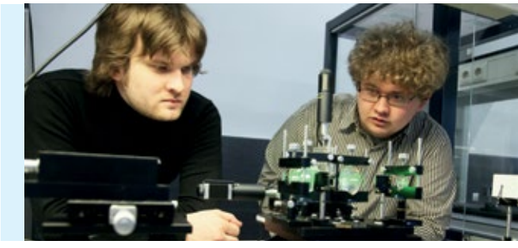
The Faculty of Electronics and Laser Technology



www.rlm.bmstu.ru
8 (499) 263 64 50*
8 (499) 263 69 15*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The faculty is responsible for the development of world-known schools in the fields of electronics, laser, electro-optical equipment and instrumentation. Departments of the faculty are equipped with unique research facilities and test benches, which allows us to prepare specialists of the highest class. The research team of the Center of Photonics and Infrared Technology, opened in 2011, mostly consists of full and associate professors and PhD students of this Faculty. ELT students have an opportunity to work at their theses using the research equipment which is unique in Russia under the guidance of world famous sciences. The Faculty collaborates with research groups from many universities all over the world.

Fields of research include: radar and radio telemetry, communications, laser systems, applied optics, information and control systems and ecological monitoring of the environment.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
ELT2	Laser and Optoelectronic Systems	Bachelor	12.03.05	Laser Equipment and Technology
		Bachelor	12.03.02	Optical Engineering
ELT6	Instrumentation Technologies	Bachelor	28.03.02	Nanoengineering
		Specialist	11.05.01	Radioelectronic Systems and Complexes

You can learn more about Master programs on page 38

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The Faculty of Mechanical Engineering Technologies

www.mt.bmstu.ru
8 (499) 263 67 00*
8 (499) 267 00 29*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The faculty was founded in 1868. The12 departments of the faculty cover the entire range of technology trends of material treatment, manufacturing of parts and quality assurance.

The center for promoting the modernization of mechanical engineering, opened in 2011, is equipped with the latest models of metalworking equipment and provides students and graduate students of the department with the opportunity to complete their projects and obtain results for their scientific work.

Since 2015 the Faculty admits students willing to study Design (MET9).

Research activities include: treatment and changing the properties of materials and products, development of new structural materials, processing machinery and tools, standardization, certification, diagnosis and management of quality engineering products, and the creation of computer-aided design processes.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
MET1	Metal Cutting Machines	Bachelor Specialist	15.03.05 15.05.01	Design and Technology software engineering industries Machinery Design
MET2	Tool Engineering and Technology	Specialist	15.05.01	Machinery Design
MET3	Mechanical Engineering Technology	Specialist	15.05.01	Machinery Design
MET4	Metrology and Interchangeability	Bachelor	27.03.01	Standardization and Metrology
MET5	Casting Technology and Equipment	Bachelor Specialist	15.03.05 15.05.01	Mechanical engineering Machinery Design
MET6	Metal Forming Technology	Bachelor Specialist	15.03.05 15.05.01	Mechanical engineering Machinery Design
MET7	Welding Technology and Equipment	Specialist	15.05.01	Machinery Design
MET8	Materials Science	Bachelor	22.03.01	Material Science and Technology of Materials
MET9	Industrial Design	Bachelor	54.03.01	Design
MET10	Rolling Technology and Equipment	Specialist	15.05.01	Machinery Design
MET11	Electronic Technologies in Mechanical Engineering	Bachelor Bachelor	28.03.02 11.03.04	Nanoengineering, Electronics and Nanoelectronics
MET12	Laser Technologies in Mechanical Engineering	Specialist	15.05.01	Machinery Design
MET13	Material Treatment Technologies	Bachelor	15.03.05	Mechanical Engineering

You can learn more about Master programs on page 38

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The Faculty of Mechanical Engineering

www.sm.bmstu.ru
8 (499) 263 61 81*
8 (499) 263 65 12*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The Faculty of Mechanical Engineering was Established in 1938. It is one of the biggest and dynamically developing faculties of BMSTU. 13 departments train specialists and conduct research in the field of rocket and space technolofy. The Faculty provides the basis for Youth Space Center, Research Center of Hydronautics and world's only Student Flight Control Center.

Areas of research activity include:

- rocket and space engineering and technology;
- armaments, military and special purpose equipment and counter-terrorist systems
- obotics, mechatronics, transportation systems and deep submergence vehicles

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
ME1	Spacecraft and Carrier Rockets	Specialist Bachelor	24.05.01 24.03.01	Design, Manufacture and Operation of Rockets and Rocket-Space Systems Rocket and Space Technology
ME2	Aerospace Systems	Specialist	24.05.01	Design, manufacture and operation of rockets and rocket-spacecraft
ME3	Spacecraft Dynamics and Flight Control	Specialist	24.05.04	Navigation and Ballistic Support Space Applications
ME7	Robotic Systems and Mechatronics	Bachelor	15.03.06	Mechatronics and Robotics
ME9	Multipurpose Caterpillar Machines and Mobile Robots	Specialist Specialist	23.05.01 23.05.02	Ground Transportation and Technological Facilities Special Purpose Vehicles
ME10	Wheeled Vehicles	Specialist	23.05.01	Ground transportation and technological facilities
ME12	Rocket and Space Engineering Technologies	Specialist	24.05.01	Design, manufacture and operation of rockets and rocket-spacecraft
ME13	Rocket and Space Composite Structures	Bachelor	24.03.01	Rocket and Space Technology

You can learn more about Master programs on page 38

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The Faculty of Power Engineering

energy.power.bmstu.ru
8 (499) 263 62 36*
8 (499) 263 64 53*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The Department of “Power Engineering” was founded in 1868 and is one of the oldest faculties of Moscow State Technical University. The reason for its considerable age is due to the rapid development of technology, starting in the middle of the last century and continuing on to this day, which would have been impossible without the establishment and improvement of energy machines – devices that convert one kind of energy into another, resulting in the movement of ground, air and space vehicles, creating conditions for complex processes.

The faculty also prepares the highest professional staff in the field of industrial, occupational and environmental safety.

The faculty, based on the oldest scientific schools, continues to stay at the front of technological progress. This is confirmed by the successful operation of the Scientific Training Center for Photon Energy and the Research and Education Center “Ion-plasma technologies,” in collaboration with the Munich Max Planck Institute.

Areas of research include: high-efficiency motors for various purposes, gas turbine engines, refrigeration and cryogenic systems, nuclear power plants and thermal physics, ion-plasma technologies, hydraulic and pneumatic systems, and protection of the environment.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
PE1	Rocket Engines	Specialist	24.05.02	Design of aircraft and rocket engines
PE2	Piston Engines	Bachelor	13.03.03	Power Engineering
PE3	Gas Turbine and Nonconventional Power Plants	Specialist	24.05.02	Design of aircraft and rocket engines
PE4	Refrigerating and Cryogenic Equipment, Conditioning and Life Support Systems	Bachelor Specialist	16.03.03 16.05.01	Refrigeration, cryogenics and life support systems. Special support systems Special Life Support Systems
PE5	Vacuum and Compressor Machinery	Bachelor Specialist	15.03.02 15.05.01	Technological machines and equipment Machinery Design
PE6	Thermal Physics	Bachelor	14.03.01	Nuclear power and thermal physics
PE8	Plasma Power Plants	Bachelor Specialist	16.03.02 24.05.02	High-tech plasma and power plants Design of aircraft and rocket engines
PE9	Ecology and Industrial Safety	Bachelor	20.03.01	Technosphere Safety
PE10	Fluid Mechanics, Hydraulic Machines and Hydropneumoautomation	Bachelor	13.03.03	Power Engineering

You can learn more about Master programs on page 38

* the telephone number is available during the admission campaign

The Faculty of Robotics and Complex Automation

vk.com/priem_RK
8 (499) 263 61 80*
8 (499) 263 65 15*
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The faculty was founded in 1987 as a response to global trends in high-tech industries. The faculty has focused not only on preparing diverse professionals, but also those who can effectively solve the problems of complex automation of research and design work, production, and after-sales support of complex technical systems. At the present stage, in a competitive environment, these tasks become only more urgent.

Preparing students involves understanding the fundamental mathematical and general technical framework, a deep mastery of computer technology and design skills, the ability to build a mathematical model, the knowledge of modern technologies and materials, and understanding the life-cycle of a product and its tasks through automation.

Student teams, working on creating their own automated systems, demonstrate significant results at international conferences and events (such as Eurobot); some of them move their projects on to the status of start-ups and small innovative enterprises.

Fields of research include: computer aided design and manufacturing, robotic systems for different purposes, industrial and warehouse logistics, multi-dimensional mathematical modeling, and knowledge-based software.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
RCA4	Hoisting and Transport Systems	Specialist	23.05.01	Ground transportation and technological facilities
RCA5	Applied Mechanics	Bachelor	15.03.03	Applied mechanics
RCA6	Computer-Aided Design Systems	Bachelor	09.03.01	Mechatronics and Robotics
RCA9	Computer-Aided Manufacturing Systems	Bachelor	15.03.04	Automation of Technological Processes and Production

You can learn more about Master programs on page 38

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The Faculty of Fundamental Sciences

fn.bmstu.ru
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

The Faculty provides a unified methodological orientation work of educational units engaged in mathematical and natural-scientific training of students. Students gain in-depth knowledge in the field of mathematical modeling of technological systems, applied mathematics, computational methods and computer technology, the development of software systems, and technical physics. Education is conducted through student participation in research.

Students who demonstrate outstanding achievements in their studies are further trained in foreign universities and partner companies.

Fields of research include: mathematical, computational modeling of technical systems and processes, composite and nano-structured materials, aero-gas dynamic and thermal processes, predicting the longevity and life of technical systems, the physics of irreversible processes, optics of moving media, nonlinear optics and laser physics.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
FS1	Advanced Mathematics	Bachelor	01.03.04	Applied Mathematics
FS2	Applied Mathematics	Bachelor	01.03.04	Applied Mathematics
FS4	Physics	Bachelor	16.03.01	Technical Physics
FS11	Computational Mathematics and Mathematical Physics	Bachelor	02.03.01	Mathematics and Computer Science
FS12	Mathematical Modeling	Bachelor	01.03.02	Applied Mathematics

The Faculty of Linguistics
Since 2014 the Faculty of Linguistics admits students for a Bachelor program in the field of theoretical and applied linguistics

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
L4	Romance and Germanic languages	Bachelor	45.03.02	Linguistics

You can learn more about Master programs on page 38

The Department «Law, Intellectual Property and Legal Expertise»

www.ipf.bmstu.ru
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

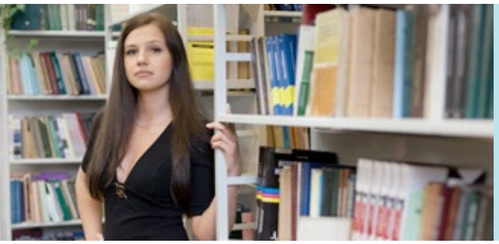
For more than 20 years, the department has been preparing unique legal computer experts and specialists in the field of intellectual property and patents.

Partners of the department include – EBM, Samsung, PricewaterhouseCoopers, and Ernst & Young.

Legal Computer Expertise is a unique specialty that can only be obtained at BMSTU. Students learn to professionally evaluate technical facts, present them in a competent legal language, become qualified to work with advanced IT development, and fight against cybercrime.

Training of specialists in the field of intellectual property and patents is implemented within the Master's program (duration – 2 years). Graduates receive comprehensive skills in the organization of the company's intellectual property, ranging from the development of reference for the creation of intellectual activity, identification of intellectual property to launch it on the market and in international transactions.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
JUR	Law, Intellectual Property and Legal Expertise	Specialistт	40.05.03	Legal Expertise



The Faculty of Social Sciences and Humanities

www.fsgn.bmstu.ru
orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

BMSTU Faculty of Social Sciences and Humanities was founded in 1971. It is focused on the development of a system approach to teaching social sciences in engineering universities and profound humanitarian training of future engineers.

The Faculty admits students to the programs Applied Informatics (profile: Information Analytics) and Sociology (profile: Sociology of Engineering and Innovation Processes). As a result of training our students get fundamental knowledge in the field of complex analysis of social information, facts and documents, as well as practical skills for mathematical analysis of social processes and phenomena using modern IT technologies and complex skills of administrative management based on innovation.

Department	Name of Department	Qualification	Classification Code	Name of field of study or specialization
SSH2	Romance and Germanic languages	Bachelor	39.03.01	Sociology (fee-based)
SSH3	Information Analytics and Political Technologies	Bachelor	09.03.01	Applied Informatics

You can learn more about Master programs on page 38

The Faculty of International Educational Programs

bmstu.ru
8(499)267-00-82
8(499)263-62-37
fiep@bmstu.ru

International students have been studying at BMSTU since 1952. The Faculty of International Educational Programs was created in 2011 in order to optimize their learning,. Currently, there are 400 students from 51 countries. Among them are citizens of the United States, Germany, France, Spain, Israel, China, Brazil, Vietnam and Myanmar, as well as students from Latin America and Eastern Europe.

International students have individual education plans, which fully comply with the training programs of the University.

An important part of the faculty is the preparatory department. Its students receive a traditional pre-university training (Russian language, mathematics, physics), and also have the opportunity to participate in programs for adaptation prior to admission to the University, as well as better prepare for admission to master's and doctoral studies.

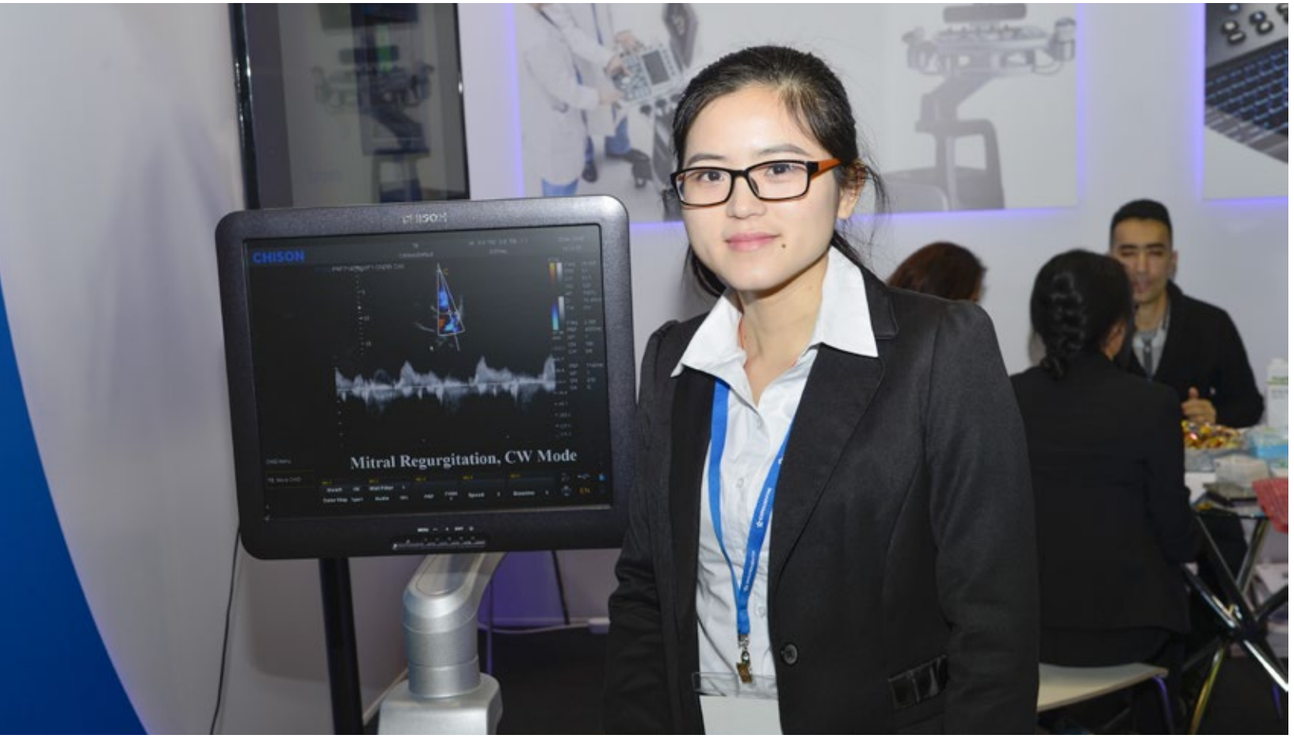
During the course of their studies, students and graduate students are actively involved in the departments' ongoing research and work, and participate in the university's social, cultural and sporting life.

International students are provided with hostel accommodation.

Preparatory Courses for Russian Speaking International Students

orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

We offer courses, developed for international students, willing to obtain a higher education at BMSTU.
According to the admission rules, international students can choose the form of the entrance examination. It can be either the Unified State Exam (USE), which is held in the Russian Federation, or the examination held by BMSTU. Attending these courses is an optimal way to learn more about the requirements and get ready for the entrance examination. The methods of these courses enable the entrants to find out, whether the level of their qualification complies with BMSTU requirements, discover the knowledge gaps and fill them.
The form of training is individual work based on our didactic materials, analysis of mistakes and giving recommendations for studying the specific chapters of disciplines. Along with exchange of materials by e-mail, the students communicate with the teachers via on-line conferences and dialogs.
We offer courses in the following disciplines: Russian, Physics, Mathematics and other disciplines.



Preparatory Courses for Non-Russian Speaking International Students

orisa@bmstu.ru
8 (499) 263 64 62
8 (499) 263 69 77

Preparatory department (PD) of Faculty of International Educational Programs (FIEP), established in 2011, is focused on pre-university training of international citizens. Every year 150 students from more than 25 countries, such as China, Vietnam, Myanmar, Cuba, Mongolia, South Korea, Tajikistan, Kyrgyzstan, Ukraine, Iraq, Turkey, Egypt, are enrolled at Preparatory Department of FIEP. The department teaches students sent for studies by the decision of the Ministry of Education and Science of the Russian Federation, as well as on the basis of individual and group contracts.

The training of the prospective students is aimed at their further studies in the main educational programs, double degree programs and postgraduate studies at BMSTU and BMSTU Kaluga Branch. Information about departments and fields of Bachelor, Specialist, Master and PhD studies is available on BMSTU website (www.bmstu.ru). The duration of training at Preparatory Department is 1–2 years, depending on students' choice.

Individual differences of students are taken into consideration. Individual study plans for students of Preparatory Department are developed with account of the level of their proficiency in Russian and their knowledge in fundamental and engineering subjects, necessary to continue successful studies at BMSTU. During enrollment at Preparatory Department students take entry tests in general subjects and Russian as a Foreign Language, developed to estimate, if their knowledge and skills meet the certification levels (state standard).

A flexible approach to training enables international students to adjust to double degree programs. Agreements between BMSTU and partner-universities are also taken into account.

On the successful completion of training at Preparatory Department the students get Certificate of Pre-University Training with the list of disciplines and results of tests and exams.

Having completed pre-university training the students take BMSTU entrance exams. According to the statistics more than 95 % of people, who successfully completed preparatory courses, are enrolled at the university.

List of Bachelor/Specialist programs

Name of field of study / Specialty	Code of field of study / specialty	Qualification	Department	Name of Department	Faculty
Applied Mathematics and Computer Science	01.03.02	Bachelor	CS9	Theoretical Computer Science and Computer Technology	CS
Applied Mathematics	01.03.04	Bachelor	FS1	Advanced Mathematics	FS
			FS2	Applied Mathematics	FS
			FS12	Mathematical Modeling	FS
Mathematics and Computer Science	02.03.01	Bachelor	FS11	Computational Mathematics and Mathematical Physics	FS
Informatics and Computer Engineering	09.03.01	Bachelor	GUIMC	GUIMC	GUIMC
			CS5	Systems of Information Processing and Control	CS
			CS6	Computer Systems and Networks	CS
			RCA6	Computer-Aided Design Systems	RCA
Information Systems and Technologies	09.03.02	Bachelor	CS3	Information Systems and Telecommunications	CS
Applied Informatics	09.03.03	Bachelor	CS6*	Software and Information Technology	CS
			SSH3	Information Analytics and Political Technologies	SSH
Software Engineering	09.03.04	Bachelor	CS7	Software and Information Technology	CS
Electronics Design and Technology	11.03.03	Bachelor	CS4	Design and Manufacture Technology of Electronic Equipment	CS
Electronics and Nanoelectronics	11.03.04	Bachelor	MET11	Electronic Technologies in Mechanical Engineering	MET
Optical Engineering	12.03.02	Bachelor	ELT3	Optoelectronic Devices for Research	ELT
Biotechnical Systems and Technologies	12.03.04	Bachelor	BE1	Biomedical Technologies	BE
			BE2	Medical Engineering Information Technologies	BE
Laser Equipment and Technology	12.03.05	Bachelor	ELT2	Laser and Optoelectronic Systems	ELT
Power Engineering	13.03.03	Bachelor	PE2	Piston Engines	PE
			PE10	Fluid Mechanics, Hydraulic Machines and Hydropneumoautomation	PE
Nuclear Power and Thermal Physics	14.03.01	Bachelor	PE6	Thermal Physics	PE
Mechanical Engineering	15.03.01	Bachelor	MET1	Metal Cutting Machinery	MET
			MET5	Casting Technology	MET
			MET6	Metal-Forming Technology	MET
			MET13	Material Treatment Technologies	MET
Technological Machines and Equipment	15.03.02	Bachelor	PE5	Vacuum and Compressor Equipment	PE
Applied Mechanics	15.03.03	Bachelor	RCA5	Applied Mechanics	RCA
Automation of Technological Processes and Production	15.03.04	Bachelor	GUIMC	Metal Cutting Machinery	GUIMC
			RCA9	Computer-Aided Manufacturing Systems	RCA
Mechatronics and Robotics	15.03.06	Bachelor	ME7	Robotic Systems	ME
Machinery Design	15.05.01	Specialist	MET1	Metal Cutting Machinery	MET
			MET10	Tool Engineering and Technology	MET
			MET12	Mechanical Engineering Technology	MET
			MET2	Casting Technology	MET
			MET3	Metal-Forming Technology	MET
			MET5	Welding Technology and Diagnostics	MET
			MET6	Rolling Technology and Equipment	MET
			MET7	Laser Technology in Mechanical Engineering	MET
			PE5	Vacuum and Compressor Equipment	PE

List of Bachelor/Specialist programs

Name of field of study / Specialty	Code of field of study / specialty	Qualification	Department	Name of Department	Faculty
Technical Physics	16.03.01	Bachelor	FS4	Physics	FS
High-Tech Plasma and Power Plants	16.03.02	Bachelor	PE8	Plasma Power Plants	PE
Refrigeration, Cryogenics and Life Support Systems	16.03.03	Bachelor	PE4	Refrigeration, Cryogenics, Conditioning and Life Support Systems	PE
Special Life Support Systems	16.05.01	Specialist	PE4	Refrigeration, Cryogenics, Conditioning and Life Support Systems	PE
Technosphere Safety	20.03.01	Bachelor	FS11	Ecology and Industrial Safety	PE
Materials Science and Technologies	22.03.01	Bachelor	GUIMC	GUIMC (Center for Complex Rehabilitation of the Deaf and Hard-of-Hearing)	GUIMC
			MET8	Materials Science	MET
			MET13	Rocket and Space Composite Structures	ME
Ground Transportation and Technological Facilities	23.05.01	Specialist	RCA4	Hoisting and Transport Systems	RCA
			ME9	Multipurpose Caterpillar Machines and Mobile Robots	ME
			ME10	Wheeled Vehicles	ME
Rocket and Space Technology	24.03.01	Bachelor	ME1	Rocket and Space Composite Structures	ME
			ME13	Rocket and Space Composite Structures	ME
Design, Manufacture and Operation of Rockets and Rocket-Space Systems	24.05.01	Specialist	ME12	Rocket and Space Engineering Technologies	ME
			ME2	Aerospace Systems	ME
			ME1	Spacecraft and Carrier Rockets	ME
Design of Aircraft Engines	24.05.02	Specialist	PE1	Rocket Engines	PE
			PE3	Gas Turbine and Nonconventional Power Plants	PE
			PE8	Plasma Power Plants	PE
Navigation and Ballistic Support of Space Technology	24.05.04	Specialist	ME3	Spacecraft Dynamics and Flight Control	ME
Aircraft Control Systems	24.05.06	Specialist	CS1	Automatic Control Systems	CS
			CS2	Orientation, Navigation and Stabilization Devices	CS
Standardization and Metrology	27.03.01	Bachelor	GUIMC	GUIMC	GUIMC
			MET4	Metrology and Interchangeability	MET
Control in Engineering Systems	27.03.04	Bachelor	CS1	Automatic Control Systems	CS
Innovation	27.03.05	Bachelor	EBM2	Economics and Manufacturing Process Management	EBM
			EBM3	Industrial Logistics	EBM
			EBM4	Management	EBM
			EBM5	Finance	EBM
			EBM6	Entrepreneurship and International Economic Activity	EBM
			EBM7	Innovative Entrepreneurship	EBM
Nanoengineering	28.03.02	Bachelor	MET11	Electronic Technologies in Mechanical Engineering	MET
			ELT6	Instrumentation Technology	ELT
Economics*	38.03.01	бакалавр	EBM1	Economic Theory	EBM
			EBM5	Finance	EBM

List of Bachelor/Specialist programs

Name of field of study / Specialty	Code of field of study / specialty	Qualification	Department	Name of Department	Faculty
Management*	38.03.02	Bachelor	EBM1	Economic Theory	EBM
			EBM3	Industrial Logistics	EBM
			EBM5	Finance	EBM
			EBM6	Entrepreneurship and International Economic Activity	EBM
			EBM7	Innovative Entrepreneurship	EBM
Business Informatics	38.03.05	Bachelor	EBM6	Entrepreneurship and International Business	EBM * -
Sociology	39.03.01	Bachelor	SSH2	Sociology and Cultural Studies	SSH
Legal Expertise	40.05.03	Specialist	JUR	Law, Intellectual Property and Legal Expertise	JUR
Linguistics	45.03.02	Bachelor	L4	Romance and Germanic languages	L
Design	54.03.01	Bachelor	MET9	Industrial Design	MET

Information about BMSTU entrance exams
The list of application documents

For all fields of training (specialties), except for 38.03.01 «Economics'', 38.03.02 « Management «38.03.05 « Business Informatics «and 40.05.03 « Legal Expertise», the entrants take exams in Russian Language, Mathematics, and Physics. Entrance exams for 38.03.01, 38.03.02, 38.03.05 are Russian Language, Mathematics, and Social Studies Entrance exams for the specialty 40.05.03 are Russian Language, Social Studies, and History

1. Questionnaire (please, contact us by e-mail: orisa@bmstu.ru to get the questionnaire)
2. A readable copy of your passport with information necessary for invitation (please, note, that your passport should be valid at least 1,5 months after the date of your entry student visa)
3. A copy of medical certificate issued by the official health authority of the applicant's country, confirming the absence of disorders incompatible with studies at university
4. A copy of medical certificate confirming the absence of HIV/AIDS, issued by the official health authority of the applicant's country
5. A copy of education certificate (with certified translation into Russian) with the list of disciplines and results of tests and exams
6. Six photos (3x4 cm, color, mat).

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+7 499 263 64 62
+7 499 263 69 77

List of the Entrance Examinations

The entrance exams for the most of the fields and specialties are **Mathematics (1st priority)**, **Physics (2nd priority)**, **Russian Language (3rd priority).** But there are several exceptions:

For 01.03.02 Applied Mathematics and Computer Science, 09.03.01 Informatics and Computer Engineering, 09.03.02 Information Systems and Technologies, 09.03.04 Software Engineering: **Computer Science and Technology (1st priority)**, **Mathematics (2nd priority)**, **Russian Language (3rd priority)**.

For 01.03.04 Applied Mathematics, 02.03.01 Mathematics and Computer Science: **Mathematics (1st priority), Physics (2nd priority), Russian Language (3rd priority).**

For 38.03.01 Economics, 38.03.02 Management, 38.03.05 Business Informatics, 39.03.01 Sociology: **Mathematics (1st priority), Social Science (2nd priority), Russian Language (3rd priority).**

For 40.05.03 Legal Expertise: **Social Science (1st priority), History (2nd priority), Russian Language (3rd priority).**

For 45.03.02 Linguistics: **Foreign Language (1st priority), Russian Language (2nd priority), Social Science (3rd priority).**

For 54.03.01 Design: **Creativity Competition (1st priority), Social Science (2nd priority), Russian Language (3rd).**

Fee-based education

The applicants for Bachelor and Specialist studies based on the contract for paid educational services, pass the entrance examinations in Mathematics and Russian.
Exceptions:

For 40.05.03 Legal Expertise: **Social Science, Russian Language.**

For 45.03.02 Linguistics: **Foreign Language, Russian Language.**

For 54.03.01 Design: **Creative competition, Russian Language.**

Calendar Plan of Admission

	June 20 (Monday)	BEGINNING OF DOCUMENT SUBMISSION
	July 11 (Monday)	Deadline for submission of documents to participate in BMSTU entrance examinations
Entrance Exams	July 12 (Tuesday)	Entrance examinations: Russian Language
	July 15 (Friday)	Entrance examinations: Mathematics, Creative Competition, Foreign Language
	July 19 (Tuesday)	Entrance examinations: Physics, Computer Science and Technology, History, Social Science
		Entrance exams for students who missed the exams for valid reason
	July 21 (Thursday)	Entrance examinations: Russian Language
	July 23 (Saturday)	Entrance examinations: Mathematics, Creative Competition, Foreign Language
	July 24 (Sunday)	Entrance examinations: Physics, Computer Science and Technology, History, Social Science
	July 26 5:00 p.m. (Tuesday)	DEADLINE FOR SUBMISSION OF APPLICATION DOCUMENTS
Selection and Enrollment	July 27 (Wednesday)	The University publishes the list of applicants on the official website. Beginning of priority enrollment
	July 28 6:00 p.m. (Thursday)	Deadline for submission of the originals of education certificates and enrollment consent for students with special rights entering BMSTU without examinations (10%)
	July 29 (Friday)	The University issues orders on the enrollment of students entering BMSTU without examinations (10%)
	August 1 6:00 p.m. (Monday)	Deadline for submission of the originals of education certificates, enrollment consent. Results of the first stage competition.
	August 3 (Wednesday)	The University issues orders on student enrollment (80%) Beginning of the second stage of enrollment
	August 6 6:00 p.m. (Saturday)	Deadline for submission of the originals of education certificates, enrollment consent. Results of the second stage competition
	August 8 (Monday)	The University issues orders on student enrollment (100%)
	End of August	Students get their Student ID cards and make contracts for accommodation in the dormitories
	August 31 (Wednesday)	Freshmen Meetings STUDENT INITIATION CEREMONY

The schedule can be changed. Please, contact us to specify the dates: orisa@bmstu.ru.

Information about Master programs

Name of field of study	Code	Department	Master program	Faculty
Applied Mathematics	01.04.04	FS-2	Applied Mathematics	FS
Mathematics and Computer Science	02.04.01	FS-11	Computational Mathematics and Mathematical Physics	FS
Informatics and Computer Engineering	09.04.01	CS-6	Intelligent Systems	CS
		RCA-6	Intelligent Subsystems for Synthesis of Optimal Project Solutions	RCA
		CS-5	Automated Systems of Information Processing and Control	CS
Information Systems and Technology	09.04.02	CS-3	Technologies of Information System Development	CS
Software Engineering	09.04.04	CS-7	Development of Software and Information Systems	CS
Electronics Design and Technology	11.04.03	CS-4	Design and Technology of Electronic Computing Machinery	CS
Electronics and Nanoelectronics	11.04.04	MET-11	Micromachining Technology and Equipment	MET
Biotechnical Systems and Technologies	12.04.04	BE-1	Biometric Technologies for Personal Identification	BE
		BE-2	Biomedical Equipment, Systems and Complexes for Noninvasive and Remote Control of Vital Parameters of Human Body	BE
		BE-4	Biomedical Engineering Management and Marketing	BE
Laser Equipment and Laser Technology	12.04.05	ELT-2	Laser Devices and Systems	ELT
Power Engineering	13.04.03	PE-2	Research and Modeling of Work Processes and Calculation of Automotive Diesel Elements	PE
Nuclear Power and Thermal Physics	14.04.01	PE-6	High Temperature Thermal Physics	PE
Mechanical Engineering	15.04.01	MET-6	Machinery and Technology of Plastic Working	MET
		MET-12	Laser Equipment and Technology	MET
		MET-6	Modeling of Plastic Deformation Processes and Machinery	MET
		MET-7	Technologies of Welding and Diagnosis	MET
		MET-5	Computer-Aided Design of Casting Equipment	MET
Technological Machines and Equipment	15.04.02	PE-5	Vacuum and Compressor Equipment of Physical Plants	PE
Applied Mechanics	15.04.03	RCA-5	Mathematical Models of Deformed Solid Mechanics	RCA
Automation of Technological Processes and Production	15.04.04	RCA-9	Intelligent Systems for Control of Technological Processes and Production	RCA
Design and Engineering Support in Machinery Production	15.04.05	MET-1	Metal Cutting Machinery	MET
Mechatronics and Robotics	15.04.06	ME-7	Robotic Systems Control	RCA
Technical Physics	16.04.01	FS-4	Applied Physics of Solid	FS
		FS-4	Optical Physics and Quantum Electronics	FS
		FS-4	Thermal and Molecular Physics	FS
High-Tech Plasma and Power Plants	16.04.02	PE-8	Plasma Power Plants	PE
Refrigeration, Cryogenics and Life Support Systems	16.04.03	PE-4	Cryogenic Equipment and Technology	PE
Technosphere Safety	20.04.01	PE-9	Multipurpose Use of Water Resources	PE

Information about Master programs

Name of field of study	Code	Department	Master program	Faculty
Materials Science and Technologies	22.04.01	MET-8	Materials Science and Technology of Coating and Surface Treatment of Materials	MET
Ground Transportation and Technological Facilities	23.04.02	ME-10	Wheeled Vehicles	ME
Rocket and Space Technology	24.04.01	ME-1	Design and Construction of Flight Vehicles	ME
		ME-13	Rocket and Space Composite Constructions	ME
Systems of Movement Control and Navigation	24.04.02	CS-2	Orientation, Stabilization and Navigation	CS
Ballistics and Aerohydrodynamics	24.04.03	ME-3	Flight Control of Automatically Controlled and Manned Spacecraft	ME
Engines of Flight Vehicles	24.04.05	PE-1	Design and Construction of Engines and Power Installations of Flight Vehicles	PE
Standardization and Metrology	27.04.01	MET-4	Test and Certification	MET
Control in Engineering Systems	27.04.04	CS-1	Intelligent Control Systems	CS
Organization and Management of High Tech Industries	27.04.06	EBM-6	Organizational and Economic Business Projection	EBM
		EBM-5	Investment Management in High Tech Enterprises	EBM
		EBM-3	Organization of Logistic Systems in High Tech Industries	EBM
		EBM-7	Innovation Management	EBM
Economics	38.04.01	EBM-1	Economics	EBM
		EBM-5	Accounting, Analysis and Audit in High Tech Enterprises	EBM
		EBM-5	International Business and Finance	EBM
Management	38.04.02	EBM-3	Logistics-Oriented Management of High Tech Enterprise	EBM
		EBM-1	State Regulation of Economic Resources	EBM
Jurisprudence	40.04.01	JUR	Legal Regulation in Science and Technology. Intellectual Property Management	JUR

The list of application documents

1. Questionnaire (please, contact us by e-mail: orisa@bmstu.ru to get the questionnaire)
2. A readable copy of your passport with information necessary for invitation (please, note, that your passport should be valid at least 1,5 months after the date of your entry student visa)
3. A copy of medical certificate issued by the official health authority of the applicant's country, confirming the absence of disorders incompatible with studies at university
4. A copy of medical certificate confirming the absence of HIV/AIDS, issued by the official health authority of the applicant's country
5. A copy of education certificate (with certified translation into Russian) with the list of disciplines and results of tests and exams
6. Six photos (3×4 cm, color, mat).

orisa@bmstu.ru
+7 499 263 64 62
+7 499 263 69 77

Kaluga Branch

248000, Kaluga,
Str. Bazhenov, 2

linterd@bmstu-kaluga.ru

www.bmstu-kaluga.ru/cmou/

The Kaluga branch of BMSTU prepares engineers, economists and managers for high-tech enterprises of the industry. Partners of the branch include big auto companies and companies that manufacture various equipment, located in the Kaluga region. Students of the branch have the opportunity to do an internship at the plants of giants like Volkswagen Group Rus and Samsung.

The structure of the branch consists of 5 faculties, which train over 3000 people. Training of students is carried out by a highly qualified and experienced team of teachers, including 6 academicians, 8 corresponding members of different academies, more than 40 doctors and more than 200 candidates.

Currently, the Kaluga branch of BMSTU trains engineers in 13 fields and specialties. The modern laboratory facilities, in all areas of their education (about 200 academic and research laboratories), allows students to consolidate theoretical knowledge, and acquire skills in the use of computer equipment and machinery. Branch laboratories are equipped with modern equipment and appliances. In addition, students have the opportunity to work with the latest and sometimes unique technic in the branches of graduate departments located on advanced enterprises in the city of Kaluga.

Training of specialists, like at the main University, is carried out in accordance with the principles of combining the advanced forms of fundamental university and engineering education. Strengthening basic training in mathematics, physics, computer science, and engineering disciplines is achieved not only by increasing the volume of courses, but mainly by incorporating modern sections, the application of new learning technologies, and students' participation in scientific and research work. During the studying of disciplines, all cycles use advanced computer technology in the learning process, implemented software packages, virtual labs, and electronic textbooks. In addition to the university-wide classes of computers, each department has its own computer labs in which students have the opportunity to do homework and work on their course and diploma projects. Students of the branch have access to all the information resources at the main University of Moscow, including the library collection and personal online office.

Department	Name of Department	Qualification	Code	Field of study or specialization
Management*	38.03.02	Bachelor	EBM1	Economic Theory
Faculty of Mechanics Design (KMK)				
K1-KB	Heat engines and thermal physics	Bachelor	13.03.03	Power Engineering
K2-KB	Hydraulic Machines and Hydropneumoautomation	Bachelor	13.03.03	Power Engineering
K3-KB	Machine Parts and Hoisting Equipment	Specialist	23.05.01	Ground Transportation and Technological Facilities
K4-KB	Automobile and Tractor Engineering	Specialist	23.05.01	Ground Transportation and Technological Facilities
Faculty of Manufacturing Technologies(MTK)				
M1-KB	Mechanical Engineering Technology	Bachelor	15.03.01	Mechanical Engineering
M2-KB	Welding Technology	Bachelor	15.03.01	Mechanical Engineering
M4-KB	Instrumentation Technology	Specialist	15.05.01	Machinery Design
M6-KB	Mechatronics and Robotics	Bachelor	15.03.06	Mechatronics and Robotics
Faculty of Economics and Social Science (SEK)				
SE2-KB	Economics and Manufacturing Process Management	Bachelor	27.03.05	Innovation
Faculty of Fundamental Sciences (FSK)				
FS1-KB	Computer Software, Information Technology and Applied Mathematics	Bachelor	09.03.04	Software Engineering
FS2-KB	Industrial Ecology	Bachelor	20.03.01	Technosphere Safety
Faculty of Electronics, Informatics and Control (EICK)				
EIC1-KB	Design and Manufacture of Electronic Equipment	Bachelor	11.03.03	Electronics Design and Technology
EIC2-KB	Computer Systems and Networks	Bachelor	09.03.01	Informatics and Computer Science
EIC3-KB	Automatic Control Systems	Bachelor	27.03.04	Management of technical systems
EIC4-KB	Materials Science	Bachelor	28.03.02	Nanoengineering
EIC5-KB	Computer-Aided Design Systems	Bachelor	09.03.01	Informatics and Computer Science

Mytischi Branch

http://www.mgul.ac.ru/eng/
141005, Mytischi,
1st Institutskaya str., 1
Tel.: +7 498 687-4347,
fax: +7 495 586-9167,
E-mail: nick@mgul.ac.ru

Mytischi Branch (MB) of Bauman Moscow State Technical University was founded in 1919. The MB has Space Faculty and the Faculty of Forestry, Forest Harvesting, Wood Processing Technologies and Landscape Architecture. MB trains bachelors, specialists and masters in computing technologies, information systems, economy and management and also in the field of forestry, forest and wood processing industry as well as the landscape design. About 7000 students study at MB. Their teachers are high quality academic staff including more than 50 academicians, full doctors and up to 200 candidates of sciences.
The MB has 14 departments, 29 Head University department sections, 5 research institutions, 3 certification centers, the library and an Experimental Forest Management Unit with the area over 34 thousand hectares. Students study at 35 higher education programs. The modern sports complex includes a stadium, two multipurpose game-based gyms, power lifting gym and a swimming pool. All non-resident students live in student dormitories.

Qualification	Code	Name of field of study or specialization
		Space Faculty (SF)
Bachelor	15.03.02	Technological Machines and Equipment
Bachelor	23.03.03	Technological Machine Maintenance
Bachelor	15.03.01	Mechanical Engineering
Bachelor	15.03.06	Mechatronics and Robotics
Bachelor	13.03.01	Thermal Engineering
Bachelor	18.03.01	Chemical Engineering
Bachelor	14.03.04	Automation of Technological Processes and Production
Bachelor	01.03.02	Applied Mathematics and Computer Science
Bachelor	12.03.01	Instrumentation Technology
Bachelor	27.03.04	Control in Engineering Systems
Bachelor	09.03.01	Informatics and Computer Engineering
Bachelor	09.03.04	Software Engineering
Bachelor	27.03.01	Standardization and Metrology
Bachelor	38.03.02	Management
Bachelor	38.03.01	Economics
Bachelor	45.03.02	Linguistics
Bachelor	44.03.04	Professional training (in various industry sectors)
Specialist	24.05.06	Aircraft Control Systems
Master	15.04.04	Automation of Technological Processes and Production
Master	01.04.02	Applied Mathematics and Computer Science
Master	27.04.04	Control in Engineering Systems
Master	12.04.01	Instrumentation
Master	09.04.01	Informatics and Computer Engineering
Master	38.04.02	Management
Master	38.04.03	Human Resource Management
Master	38.04.04	State and Municipal Management
Master	38.04.01	Economics
Master	38.04.08	Finance and Credit
		Faculty of Forestry, Forest Harvesting, Wood Processing Technologies and Landscape Architecture (FT)
Bachelor	35.03.01	Forest Science
Bachelor	35.03.02	Technology of Logging and Wood Processing
Bachelor	35.03.10	Landscape Architecture
Bachelor	18.03.01	Chemical Engineering
Master	35.04.01	Forest Science
Master	35.04.02	Technology of Logging and Wood Processing
Master	35.04.09	Landscape Architecture

Distance Preparatory Courses

orisa@bmstu.ru
+7 499 263 64 62
+7 499 263 69 77

Along with weekend preparatory courses BMSTU has distance courses in Physics, Mathematics, Russian Language and Informatics.

The program of the distance preparatory courses is intended for students of 8-11 grades of secondary school, students of preparatory courses and everyone, getting ready for the entrance exams and willing to continue their studies at engineering high schools.

The course of the secondary school program is divided into units in each discipline. Students of the distance preparatory courses get access to didactic materials with the basic theoretical information in brief and typical test assignments of BMSTU entrance exams and Unified State Exam. Each unit contains a test, which is completed by the student, corrected by the teacher and sent back to the student with the best solution to the test.

The students can choose between individual program and studying in a group. Depending on this choice the student can communicate with the teacher on the educational portal.

The demo version of the courses is available on the portal http://dovuz.bmstu.ru.

Department	Credits	Hours
Informatics and Communication Technologies	2	88
Mathematics	2	88
Physics	2	88

Second Higher Education and Business education

isot.bmstu.ru/2edu
+7 499 263 66 05
+7 499 261 97 63

BMSTU provides an opportunity to get a second degree and continuing professional education for all specialties and areas of Bauman, including an MBA (Master of Business Administration).

Each student is offered an individual training plan, making the program accessible to persons with technical, humanitarian and basic education. The form of study is full time.

Classes in the study groups are held in the evening. Selection shall be made twice a year, with the start of training in September and February.

As part of further education in BMSTU, Bauman organized courses in-depth study of English, German, French, Spanish, Italian and Chinese based on specially developed programs for students with different levels of training.

Students and trainees Bauman at the request may, in addition to its basic training program learn separate disciplines. The list is constantly growing and improving, focusing on the requirements of today.

Wide variety and freedom of choice, both in direction and the number of disciplines, allows the students to obtain additional knowledge at their convenience.

The most popular training programs of second higher education are:

Specialties and fields	Qualification (level)	Approximate period of study
Informatics and Computer Science	Bachelor Master	2 years 2 years
Industrial Design	Bachelor Master	2,5 years 2 years
Biotechnical Systems and Technologies	Bachelor Master	2,5 years 2 years
Technological Machinery and Equipment	Bachelor Master	3 years 2 years
Management	Bachelor Master	2,5 years 2 years
Linguistics	Bachelor Master	2,5 years
Applied Mathematics	Bachelor Master	2,5 years
Applied Informatics (Sociology)	Bachelor Master	2,5 years 2 years
Jurisprudence	Bachelor Master	2,5 years
Legal Expertise	Specialist	2,5 years
Mechatronics and Robotics	Bachelor Master	2,5 years 2 years

Information about PhD programs

Code of field of study (specialty)	Name of field of study (specialty)
Mathematics and Mechanics	01.06.01
Informatics and Computer Engineering	09.06.01
Electronics, Radio Engineering and Communication Systems	11.06.01
Photonics, Instrumentation, Optical and Biotechnical Systems and Technologies	12.06.01
Mechanical Engineering	15.06.01
Physical and Engineering Sciences and Technologies	16.06.01
Technosphere Safety	20.06.01
Materials Technologies	22.06.01
Aerospace Engineering	24.06.01
Control in Engineering Systems	27.06.01
Economics	38.06.01
Political Sciences and Regional Studies	41.06.01
Philosophy, Ethics and Religious Studies	47.06.01

The list of application documents

orisa@bmstu.ru
+7 499 263 64 62
+7 499 263 69 77

1. Questionnaire (please, contact us by e-mail: orisa@bmstu.ru to get the questionnaire)
2. A readable copy of your passport with information necessary for invitation (please, note, that your passport should be valid at least 1,5 months after the date of your entry student visa).
3. A copy of medical certificate issued by the official health authority of the applicant's country, confirming the absence of disorders incompatible with studies at university.
4. A copy of medical certificate confirming the absence of HIV/AIDS, issued by the official health authority of the applicant's country.
5. A copy of education certificate (with certified translation into Russian) with the list of disciplines and results of tests and exams.
6. Abstract in the field of the prospective research in Russian (1-2 pages) and the list of scientific publications (if any)
7. At least two letters of recommendation by scientists in Russian or English
8. Two photos (3*4 cm, color, mat).

Several Facts on Bauman University

Capricorns

Freshmen at Bauman are commonly called Capricorns. They have no academic backlogs (failed exams literary mean "tails" in Russian) till their first mid-term exams, which begin on December 22. So, the "tails" start to grow under the sign of Capricorn.

Continuity of Generations

Nikolay Zhukovskiy, who is often called the father of Russian aviation, was the scientific advisor of Andrey Tupolev, designer of more than 100 aircrafts. In his turn, Tupolev supervised Sergey Korolev, the lead Soviet rocket engineer.
If you passed Strength of Materials, you can marry
This set phrase appeared in the times of our parents. Indeed, Strength of Materials is a tough subject.
Professor Khudiakov, who headed the Department of Strength of Materials, was considered a very strict examiner, and students followed the unwritten rule of postponing their marriage until they pass his subject. The proverb is still relevant, though today the situation has got more complicated. Education modules and ratings have resulted in a great number of even tougher courses which make students forget about creating a family until they get Master or even PhD degrees.

The Red Square

This is how Bauman students call the hall near the canteen area in the left wing of the main building because of its Doric columns and red walls. And just like the real Red Square it is always crowded. It is a very convenient meeting point.

Canteens

BMSTU Food Service won't leave you hungry. The average price for a three-course meal and a drink is 150 rubles. Bauman student' favorite choice of all time is the chicken sandwich with pickled cucumbers.

The Fountain

The fountain is one of the most favorite places of Bauman students. They believe that its opening in spring and closing in autumn is high time for them to start working at their course projects. Another tradition is bathing in the fountain after graduation. On summer days the fountain area is full of loving couples and lazy students, skipping their classes.

Bauman Moscow State Technical University

National Research University