

BAUMAN MOSCOW STATE TECHNICAL UNIVERSITY

National research university of technology

Type of enterprise	Higher education institution
Field of activity	Machine and instrument building
Chief	Rector, doctor of technical sciences, professor Anatoly A. Aleksandrov

HISTORICAL OVERVIEW

July 1st, 1830 Emperor Nicholas I approved [«Statute of Moscow Craft School»](#). It was inception of the first Russian technical university.

New school was created to teach various crafts as well as basic sciences. By 1868 education became so good that MCS was reorganized as Imperial Moscow Technical School (IMTS). The main purpose of IMTS was to «educate construction engineers, mechanical engineers and industrial technologists». IMTS achieved outstanding results in technology, chemical, food and textile industry, metal and wood treatment, and mechanical sciences.

IMTS system of handicraft education of engineers was recognized all over the world. «Russian method» became especially well-known after Vienna World Exhibition (1873) where it was awarded Big Gold Medal. IMTS was recognized the best machine-building education institution of Russia and joined the ranks of the world leading polytechnic schools. A lot of outstanding scientists taught in IMTS, such as D. Mendeleev, N. Jukovsky, P. Chebychev, S. Chaplygin, A. Yershov, D. Sovetkin, F. Dmitriev, A. Letnikov, A. Gavrilenko.

In the Soviet period it was renamed Moscow Higher Technical School (MHTS). MHTS continued education of engineers for machine and instrument building. In 1938 new military departments were created in MHTS: tank, artillery, and ammunition. In 1948 rocket department was added.

A lot of prominent scientists and engineers graduated from MHTS. The list includes aircraft and rockets designers such as Andrey Tupolev and Sergey

Korolev; Nicholay Dollezhal, a designer of nuclear stations; prominent metallurgist Alexander Tselikov, Sergey Lebedev – a chief designer of the first Soviet computer.

July 27, 1989 USSR State committee for peoples' education conferred on Moscow Higher Technical School a name of Technical University (BMSTU). BMSTU was honored to be the first Russian technical university. Nearly 200.000 engineers graduated from the University. Many of government officials, chief designers, CEOs of big enterprises, cosmonauts are Bauman graduates

ACTIVITY

BMSTU has 19 departments providing full-time education. University provides postgraduate and doctorate programs and has two affiliated secondary schools. More than 19,000 students study in BMSTU, and specialties cover all range of modern machine and instrument building. More than 320 doctors of science (Russian degree higher than PhD) and 2000 candidates of science (similar to PhD) teach and do research in BMSTU. Main parts of the University are eight **scientific and educational divisions**. Each of them consists of scientific and educational branch. Several **branch departments** also exist, dealing with particular fields of industry. They are based on big factories and organizations, situated in Moscow, Moscow suburbs (Reutov, Krasnogorsk and Korolev) and in Kaluga. BMSTU has unique experience of teaching hearing-impaired students since 1934.

Bauman University is one of the three Russian universities (along with Lomonosov Moscow State University and Saint-Petersburg Polytechnic University) that started in 1926 military education of students. Today military institute carries out training of military officers of 21 specialties. Military specialties are based on civil ones and help to teach high-qualified civil specialists. The institute consists of five military subdepartments (one of them is in Kaluga branch), civil defense subdepartment and military training center. Practical training is carried in Dmitrovo branch, where military hardware is deployed.

BMSTU has wide international cooperation: student exchanges, postgraduates, doctorates, teachers and scientists, teaching international students, common research, education methodology development, conferences, seminars, and congresses. Now the University has relations with more than 70 universities in Europe, America and Asia.

All educational and scientific activities of BMSTU are future-oriented. It is taking

part in conversion programs, defining priorities of new scientific areas development, developing foundations of government human resources system for high-tech industry.

BMSTU combines precise calculations with engineering intuition, follows traditions of Russian engineering school method, subtly appreciates new fields of activity, carries socioeconomic approach to complex engineering problems and humanist approach to education. All of that allows BMSTU to be on the cutting edge of scientific and engineering progress.

The feature of BMSTU is a close cooperation with industrial, scientific, educational and cultural institutions. TsAGI, Jukovsky Air Force Academy, NAMI, TsIAM, some departments of Chemical Machine Building Institute, Chemical Technology Institute and Engineering Physics Institute, Military Academy of Chemical Defense, MAI, Power Engineering Institute, Architectural Institute, and another leading scientific, educational and industrial institutions are BMSTU successors. Their staff is aimed at new scientific and technological achievements.

Bauman University — [National Technological University](#) – carries research in cutting-edge areas of science and technology, basing on eight technological platforms. 32 companies included BMSTU in their innovational programs. Today the University conducts 90 considerable scientific programs in different fields. BMSTU is [Skolkovo](#) founder.

Now strategy of the University is to provide human resources for cutting-edge areas of Russian science and technology, in prior economic development directions of the country, such as: information and communication systems; nanosystems and materials industry; power supply and conservation; biosystems; security and counterterrorism; transportation and aerospace systems; promising military equipment.

BMSTU is always ranked the first among Russian engineering education institutions.