## Mathematics

## Novosibirsk State University

Degree or qualification is awarded: Bachelor of science in Mathematics and Mechanic

Language of study: **Russian** Mode of study: **full-time** Duration: **4 years** Availability of free education: **yes** Price: **4 500 USD per year** 

Programme webpage at the university website: <u>http://nsu.ru/0bccef7806bbdd13b6f7059d2ac1a373</u>

Programme curator: **Kseniya Shmugurova** Tel.: **+7-383-3634292** E-mail: <u>interstudy@lab.nsu.ru</u>

On the one hand, students majoring in Mathematics represent the mathematicsl elite of our country. These are reseearch mathematicians, that is, people who must ensure the growth and development of mathematics itself. Every year the world-famous research centers in Russia and abroad are replenished by the graduates fr om NSU, who have followed the path from being a student to making a Master's degree and then a PhD.

On the other hand, graduates with a degree in Mathematics are broadly educated specialists capable of independent research work, who know well how to use mathematical methods in applications. For example, geometricians and topologists can engage in computational topology and solve applied problems related to computer modeling, computer graphics and visualization. Experts in number theory, which seems to be very theoretical at first glance, are engaged in cryptography, i.e. the methods of information security, data integrity, and verification of authorship authenticity or other properties of the object. The most striking proof of the fact that pure mathematics is necessary for solving applied problems is the theory of probability and mathematical statistics. Specialists in this field are engaged in studying risk analysis theory of insurance companies, queuing theory among other things.

Thus, the graduates with a Maths degree are in high demand in all areas where mathematical methods and computer technology are used as well as in research centers and educational institutions.

Students majoring in mathematics are engaged in research in the following areas:

- Algebra and Number Theory
- Mathematical logic and the foundations of mathematics
- Probability theory and mathematical statistics
- Mathematical and functional analysis
- Geometry and topology
- Differential equations and mathematical physics
- Computability theory and the theory of algorithms.

## Specializations within this programme