

Numerical Statistical Modeling

Novosibirsk State University

Degree or qualification is awarded: **Master of science in Applied Mathematics and Informatics**

Language of study: **English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **4 300 USD per year**

Programme webpage at the university website:

<https://english.nsu.ru/admission/programs/master-s-degree-programs-english/numeral-statistical-modelling/>

Programme curator: **Kseniya Shmugurova**

Tel.: **+7-383-3634292**

E-mail: interstudy@lab.nsu.ru

Master Educational Programme "Numerical Statistical Modelling" is a 2-year English-taught programme at the Master level. It is aimed at training and developing research skills in Numerical Modelling, Monte Carlo Methods and in their applications.

The Programme is research-oriented. Each semester a student is supposed to devote a half of time to a research project, to be done at Institute of Computational Mathematics and Mathematical Geophysics. Results of this research project must be presented in a form of a Master Dissertation at the end of 2nd year of studies.

Topics of lectures and research includes, but are not limited to

- numerical modelling of random values and processes,
- solution of ordinary and stochastic differential equations,
- theory of radiation transfer,
- stochastic simulation methods in applied mathematics, physics, meteorology, economics (including financial mathematics),
- discrete-stochastic numerical methods,
- modern computer technologies in stochastic simulation, etc.

Lecture courses and research supervision are provided by professors of the Novosibirsk State University and leading researchers from institutes of the Russian Academy of Sciences. They all are members of the worldwide known scientific school on numerical stochastic simulation headed by Professor G.A.Mikhailov.

Specializations within this programme