



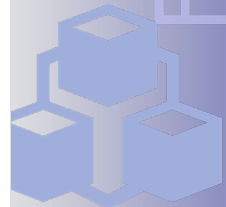
St Petersburg
University

ADVANCED MECHANICS AND MODELING

Level of education:	Master programme
Type of instruction:	Full-time
Duration:	2 years
Language of instruction:	English

BENEFITS OF THE PROGRAMME

- The programme is aimed at training highly qualified and internationally competitive specialists in the field of mechanics.
- Students are instructed in all main fields of modern mechanics, as well as interdisciplinary areas at the intersection of chemistry, physics, biology, computational mathematics and other sciences.
- The programme is designed to provide students with a holistic study of higher mathematics, fundamental mechanics and computer modeling techniques.
- Particular attention is paid to the development of skills in conducting research, applying the apparatus of modern theoretical and applied mathematics to solve urgent problems in analytical mechanics, control theory, mechanics of solids, mechanics of fluids, gases and plasma, nano- and biomechanics.
- Students are involved in research projects with renowned scientists in the areas of science that are critical for modern society. It is possible to conduct research using the unique experimental facilities in our own laboratories and SPbU resource centres.
- The programme is implemented by an outstanding team of teachers, including more than 20 professors working in the most challenging areas of mechanics: mechanics of nano-materials, composites, shape memory alloys; dynamics of complex and nonequilibrium media; computational and experimental aeromechanics; analytical mechanics; biomechanics.



KEY SKILLS

Graduates are prepared to:

- conduct multidisciplinary scientific research;
- analyse new theoretical and experimental trends in mechanics;
- develop mathematical models for challenging problems in mechanics of solids, fluids, gas and plasma, nano- and biomechanics, analytical mechanics;
- carry out computer modeling of advanced mechanical problems.

CAREER OPPORTUNITIES

Main fields of activity are mathematical modeling, scientific and applied research for the science-driven high-tech industries, industrial and technological activities.

Graduates of the programme are ready for professional activities in the Russian Federation and abroad in:

- research, development and design institutes
- civil and mechanical engineering
- space and rocket industry
- media of computerization and communication
- other fields of technology and science.

PROGRAMME OVERVIEW:

[Read more >](#)

CONTACT US

International Admissions Office

Location: 13B Universitetskaya Emb., St Petersburg, 199034, Russia

Working hours: Monday – Friday, from 10 AM to 6 PM

Phone: 007 812 3636633

admission@spbu.ru

