Applied Mathematics and Physics

Peter the Great St. Petersburg Polytechnic University

Degree or qualification is awarded: Master of Applied Mathematics and Physics

Language of study: **Russian** Mode of study: **full-time**

Duration: 2 years

Availability of free education: yes

Price: 224 400 - 234 600 RUB per year

Programme curator: Mr. Roman Philippov

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The curriculum gives students deep knowledge of mathematics, physics, continuum mechanics and numerical methods. All courses are given in Russian. The graduates of the program receive a profound education in applied mathematics and physics.

Specializations within this programme

Experimental and Computational Thermophysics

The curriculum gives all students in the program special skills in heat transfer and thermodynamics, as well as ability to use advanced mathematical, experimental and computational tools needed to work in the fields of these disciplines. The program gives advanced understanding of heat and fluid flow processes and their role in modern methods of power generation, material production and fire safety. The academics that support the program, either through teaching, or through supervision of research projects, carry out research in wide range of topics, mostly related to industrial heat and mass transfer, combustion modeling and thermodynamics. The program has a strong practical orientation, in particular, in the field of nuclear power engineering, applied chemical thermodynamics and some others.

Physical-mechanical modeling and high performance computations in fluid dynamics

The curriculum gives all students in the program special skills in fluid dynamics, combustion, heat transfer and parallel computations. The program gives in-depth understanding of physical-mechanical models of modern fluid dynamics, as well as up-to-date numerical and experimental techniques used to solve heat and fluid flow problems. The academics that support the program, either through teaching, or through supervision of research projects, carry out research in wide range of topics, mostly related to Computational Fluid Dynamics. The graduates will be able to use advanced mathematical, computational and experimental tools needed to work either in research or in industry. The graduate will be able to set and solve complicated interdisciplinary problems.