

**Division:** *Institute of Natural Sciences and Mathematics, Department of Computational Mechanics*

**Academic programme:** *03.04.01 Applied Mathematics and Physics, Physical and Chemical Continuum Mechanics*

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

**Programme length:** *2 years*

**Programme level:** *Master's degree*

**Language of instruction:** *Russian*

**Programme description:** *Graduates of the programme are specialists in constructing mathematical models of the mechanics of multicomponent media, fast physical and chemical processes; in developing new algorithms and computer programs for research and applied purposes. The programme is implemented jointly with Russian Federal Nuclear Centre – VNIITF (Zababakhin All-Russian Scientific Research Institute of Technical Physics). Students have the opportunity to engage in scientific activities under the guidance of leading researchers of Russian Federal Nuclear Centre – VNIITF.*

**Main programme-specific classes:**

- *Gas Dynamics*
- *Numerical Methods in Continuum Mechanics*
- *Theory of Combustion*
- *Heat and Mass Transfer*
- *Supercomputer Modelling and Technologies*
- *Interaction of Radiation with Matter*
- *Models of Equations of State for Condensed Media*
- *Methods of Experimental Physics*
- *Physics of Explosion and Impact*

**Programme manager:** *Elena S. Shestakovskaia, Doctor of Sciences (Physics and Mathematics), Associate Professor, Head of the Department of Computational Mechanics*