Beam-Plasma Systems and Technology

Moscow Institute of Physics and Technology (National Research University)

Degree or qualification is awarded: Master's degree

Language of study: **English** Mode of study: **full-time** Duration: **2 years** Availability of free education: **yes** Price: **435 000 RUB per year**

Programme webpage at the university website: https://mipt.ru/english/edu/master/beam-plasma

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The programme is targeted at fundamental and applied researches in plasma physics and plasma chemistry associated with advanced technologies; it is based on the system approach to the beam-plasma systems and to their life-cycle support.

KEY ADVANTAGES:

Electron-beam systems are known to be very effective to settle a number of technological problems or to carry out certain missions on spacecraft board. The Master Programme gives students unique chance to study advancedindustrial andaerospace applications of the Electron-Beam Plasma. The Programme is interdisciplinary and joins physical, chemical, engineering and biomedical aspects. All fundamental and applied problems are considered on the basis of system approach. Students acquire basic knowledge and professional skills and then they can elect specialization in scientific, engineering or business fields. In any case practical training by means of labs and participation in real projects are the main part of the educational process.

STUDIED COURSES:

- Electron kinetics;
- Plasma physics;
- Plasma chemistry;
- Plasma medicine;
- Chemistry of high energies for inorganic, organic and bio-organic matters;
- Plasma technical systems;
- System analysis and simulation of Beam-Plasma Systems;
- Industrial Beam-Plasma technologies;
- Aerospace Beam-Plasma technologies;
- Elective discipline.

Specializations within this programme