Physics of High and Ultra High Energy Particles (in English)

National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)

Degree or qualification is awarded: Master degree

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

Duration: 2 years

Availability of free education: **yes**Price: **168 090 rubles per semester**

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Goals of the Program (brief description of the Program): Training of graduates capable of working in the field of elementary particle physics and high energy cosmic rays. Graduate should possess general and special knowledge.

Characteristics of the scope and objects of professional activity of future graduates: nonacelerator high and ultra-high energy particle physics, elementary particle physics, cosmic ray physics, muon and neutrino physics, developing of equipment for studies in the field of high and ultra-high energy physics, experimental research, experimental data processing and analysis.

Objects of the professional activity: Detectors and assemblies for elementary particles and cosmic rays studies, experimental facilities and automized systems for experimental data collection and processing, theoretical models for experimental data description, computer modelling and statistical methods for analysis.

Brief description of the curriculum: Master program combines academic studies and scientific work in real conditions of modern physics experiment. Master students take part in current research, in experimental data processing and analysis, in physics data collection. Academic courses provide master students with fundamental knowledge and link them with current studies with the help of the unique NEVOD scientific facility.

The base of industrial and/or scientific practice and employment: Master students have scientific practice mainly in NEVOD scientific facility. Graduates usually employed by Russian academic centres, RAS institutions and by other organisations.

Specializations within this programme