

# la Universidad Nacional de Investigación Nuclear “Instituto de Ingeniería Física de Moscú”



Año de fundación: **1942**



Total de estudiantes: **7 064** / Estudiantes extranjeros: **1 249**



Facultades: **12** / Departamentos: **76**



Profesores: **1 503**

Profesor  
**512**

Docentes  
**649**

Doctor en ciencias  
**461**

Candidatos de las ciencias  
**759**

Profesores extranjeros  
**223**



Principales programas de educación para los extranjeros: **177**

Licenciatura  
**55**

Maestría  
**68**

Especialista  
**23**

Formación del personal altamente calificado  
**31**



Programas educativos adicionales para los extranjeros: **13**

Programa de preparación preuniversitaria  
**1**

El estudio de la lengua rusa como  
extranjera  
**1**

Programas cortos  
**11**

Otros programas

The history of the National Research Nuclear University MEPhI (Moscow Engineering Physics Institute) began with the foundation in 1942 of the Moscow Mechanical Institute of Ammunition. The leading Russian nuclear university MEPhI was later established there and top Soviet scientists, including the head of the Soviet atomic project Igor Kurchatov, played a part in its development and formation. Six Nobel Prize winners have worked at MEPhI over the course of its history – Nikolay Basov, Andrei Sakharov, Nikolay Semenov, Igor Tamm, Ilya Frank and Pavel Cherenkov.

**Today, MEPhI is one of the leading research universities of Russia, training engineers and scientists in more than 200 fields. The most promising areas of study include:**

- Nanomaterials and nanotechnologies;
- Radiation and beam technologies;
- Medical physics and nuclear medicine;
- Superconductivity and controlled thermonuclear fusion;
- Ecology and biophysics;
- Information security.

In addition, future managers, experts and analysts in the fields of management, engineering economics, nuclear law and international scientific and technological cooperation study at MEPhI.

### **Programmes at MEPhI:**

- **Meet international standards for quality of education.**

Since 2014, the university has been implementing standards of the CDIO Initiative for modernising engineering training in higher education. The standards aim to improve the quality of the next generation of engineering graduates and are also used by leading world universities such as Stanford University, California State University and Massachusetts Institute of Technology.

- **Are accredited by the FEANI (Federation of National Engineering Associations) and Agency for Accreditation of Engineering Education Programmes (ANO APIO).**

A graduate who studied under an accredited programme and has the necessary professional experience can obtain the rank (international certificate) of Euroengineer.

### **MEPhI students are guaranteed the following:**

- A credit-based and modular study system (study programme consists of modules and units).
- A student can devise their own individual trajectory and take some of the modules at a partner university with established joint educational programmes. The ECTS (European Credit Transfer and Accumulation System) is used; upon completion of studies, an appendix to the European diploma indicating the number of credits and grades on the ECTS scale in each subject may be issued to a student.
- Internships at distinguished academic centres and laboratories around the world.
- Double degree programmes.
- International academic mobility programmes.

A unique feature of MEPhI is its combination of teaching, research and innovation. Students are involved in research from the very beginning of their studies, and from third year participation in research projects is mandatory. Final year undergraduates, master's students and postgraduate students conduct research in the university's laboratories, departments and scientific centre.

World-class scientific centres are long-standing foreign partners of the university: European Centre for Nuclear Research (CERN, Switzerland), Brookhaven National Laboratory (BNL, USA), Los Alamos National Laboratory (LANL, USA), Lawrence Livermore National Laboratory (LLNL, USA), Enrico Fermi National Accelerator Laboratory (Fermilab, USA), the German Electron Synchrotron (DESY, Germany), Institute of Astrophysics of the Max Planck Society (Germany), the European Synchrotron Radiation Facility (ESRF, Grenoble, France), the International Thermonuclear Experimental Reactor (ITER, France), the Academic Medical Centre (the Netherlands), the High Energy Accelerator Research Organisation (KEK, Japan), the National Institute of Nuclear Physics (INFN, Italy) and others.

MEPhI participates successfully in major scientific collaborations: ALAS ALICE on the large hadron collider (CERN), STAR and PHENIX (Brookhaven National Laboratory, USA), GLUEX (Jefferson Laboratory, USA), FAIR (Germany), BELLE, BELL II and ILC (Japan), NA 61/ SHINE (CERN), and DARKSIDE (Italy). In 2014-2015, it took part in new collaborations with CMS, AMANDA, SHIP and ICECUBE. In addition, MEPhI participates in major scientific collaborations at the DESY synchrotron centre, Russian-Italian collaboration in the PAMELA and ARINA experiments, the Russian-European experiments KORONAS and PHOTON, and the international experimental thermonuclear reactor ITER.

Among Russian organisations, strategic partners of MEPhI in the sphere of high technologies, ensuring world-class research and development, include: Rosatom State Corporation, Joint Institute of Nuclear Research (OJIA) (Dubna),

OJSC TVEL, National Research Centre Kurchatov Institute, OJSC Sukhoi Company TRINITI (Troitsk), P.N. Lebedev Physics Institute of the Russian Academy of Sciences, Institute for Nuclear Research of the Russian Academy of Sciences, Nuclear Safety Institute of the Russian Academy of Sciences Joint Institute for High Temperatures of the Russian Academy of Sciences( JIHT), Federal State Unitary Enterprise Russian Federal Nuclear Centre All-Russian Research Institute of Experimental Physics (RFNC ARRIEP), IPG IRE-Polus, Ministry of Industry and Trade of RF, NRC The Kurchatov Institute, Joint Stock Company Radio Engineering Corporation Vega, FSUE RPC Istok, Federal Financial Monitoring Service, CJSC Moscow Centre of Spark Technologies (MCST), LLC Accord-TSHM and others.

## Éxito de los estudiantes

### La asociación internacional

#### Olimpiads



#### **All-Russian Academic Competitions**

**Annually, April-May**

The competition is held in topical scientific and educational fields:

- Physics;
  - Nuclear physics and technologies;
  - Information security;
  - Automation, electronics and nanoelectronics .
- The participants compete in individual and team championships, and for special nominations. Winners receive scholarships of the President of Russia, and preferential terms when enrolling in Master's Degree Programmes and Postgraduate studies at leading Russian universities.



#### **MEPhI International**

**Annually, September-December (selection round), February-March (final)**

The university holds several international academic competitions for university students:

- "Nuclear physics and nuclear technologies",
  - "Economic security",
  - "Systems analysis",
  - "Rosatom" (10 sections – physics, nuclear power, culture and scientific and technological progress, physical material sciences, physics of the micro and macroworld, plasma physics and lasers, physics of kinetic phenomena, information security, applied molecular physics, and automation, electronics and nanostructural electronics).
- Students of relevant subject areas, predominantly 2nd-4th year students, are invited to take part in the competitions. The competitions are held both at the university and online through the internet portal [olympic.mephi.ru](http://olympic.mephi.ru).



**Junior All-Russian  
Contest of High School  
Student Research**

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The competition has been held since 1998 and is organised by MEPhI and Rosatom State Atomic Energy Corporation with the participation of the Ministry of Education and Science of Russia and the Department of Education of Moscow.

The purpose of the competition is to develop the design skills of students in the natural, engineering and mathematical sciences. The competition is held in six sections (physics, mathematics, chemistry, information science, biology, engineering sciences and robotic technology). High school students aged 14 and above are invited to take part in the competition. Over 1500 people take part in the competition annually.

Junior is one of the Russian selection grounds of the international Intel ISEF (International Science and Engineering Fair) competition; students from 80 countries take part in it. The organising committee and the jury of the competition, in addition to leading scientists of MEPhI, includes Russian Academy of Sciences members, outstanding researchers, teachers and public figures.



**Engineering  
Competition for High  
School Students**

**Annually, December-  
January (selection  
round), February (final)**

The competition is held by MEPhI with the participation of St. Petersburg Electrotechnical University LETI (St. Petersburg), Samara State Aerospace University (Samara), Moscow State University of Railway Engineering (Moscow) and Novosibirsk State Technical University (Nizhny Novgorod).

Subjects – physics, engineering and technology. Competition tasks include elements of applied mechanics and mechanical engineering, theoretical thermodynamics, electrical engineering, electronics, and nuclear technologies.

The goal of the competition is to stimulate young people's interest in studying engineering.



**Zvezda  
Multidisciplinary  
Engineering Academic  
Competition**

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The competition has been organised on instruction from the President of Russia Vladimir Putin. MEPhI is an organiser of the section on nuclear engineering and technologies.



**United Interuniversity  
Mathematical  
Olympiad**

**Annually, December-  
January (selection  
round), February (final)**

One of the largest mathematics olympiads in Russia. It has been held since 2009 among high school graduates and number of participants exceed 500.



**Rosatom Industry  
Physics and  
Mathematical  
Academic Competition**

**Annually, October-  
January (selection  
round), February-March  
(final round)**

The competition held by MEPHI jointly with Rosatom State Atomic Energy Corporation. High school students aged 12 and above are invited to take part. Subjects – mathematics and physics.

Annually, over 14,000 students take part in the Rosatom competition. The purpose of the competition is to find prospective students for technical fields. In the top 5 of the best physics and mathematics competitions in the country.

## **Departamento de preparatoria**

### **Información de contacto**

31 Kashirskoye Highway, Moscow, Russia, 115409

<https://eng.mephi.ru/>

#### **International Relations Department**

**+7 (495) 788-56-99 ext. 8590**

(10:00 – 18:00 (UTC+3) MSK)

[ASPolyanskaya@mephi.ru](mailto:ASPolyanskaya@mephi.ru)

#### **Foreign students faculty**

**+7(495)788-56-99 ext. 8045**

(10:00 – 18:00 (UTC+3) MSK)

[ONPetukhova@mephi.ru](mailto:ONPetukhova@mephi.ru); [OVLikhacheva@mephi.ru](mailto:OVLikhacheva@mephi.ru); [OGChugunova@mephi.ru](mailto:OGChugunova@mephi.ru)

### **Branches of university**

#### **Obninsk Institute for Nuclear Power Engineering**

1 Studgorodok, Obninsk, 249040, Kaluga Region

**+7 (495) 788-56-99 (add. 1101)**

[iate@mephi.ru](mailto:iate@mephi.ru)

<http://www.iate.obninsk.ru>

#### **Balakovo Engineering and Technology Institute (BITI MEFHI)**

140 Chapaeva Street, Balakovo, 413853, Saratov Region, Russia

<http://www.bitl.org.ru>

#### **Volgodonsk Engineering and Technical Institute (VETI MEFHI)**

73/94 Lenin Street, Volgodonsk, 347360

**+7 (863) 922-57-64**

[viti@mephi.ru](mailto:viti@mephi.ru)

<http://www.viti-mephi.ru>

#### **Dimitrovgrad Engineering and Technological Institute (DITI MEFHI)**

294 Kuybisheva Street, Dimitrovgrad, 433511, Ulyanovsk Region

**+7 (495) 788-56-99 add. 5401**

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