

Neural Networks and Computers

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/neural>

Programme curator:

Tel.: **+74957370258**

E-mail: marina.fomina@list.ru

The programme is designed to orient the students with the domain of computation science, neural network and their implementation in modern computer architectures with the application in the area of: ·

- Information Security; ·
- Image Processing (2D and 3D); ·
- Signal Processing (voice, radar, etc.); ·
- Data Processing (text and other); ·
- Control systems; ·
- Modern computing hardware: GPU, FPGA, neurochips

KEY ADVANTAGES: ·

Worldknown foreign partners and Professors;

Focused on students projects;

State-of-the-art in neural networks and neurocomputers;

Wide range of neural network applications.

STUDIED COURSES:

- Basics of theory of probability and statistics;
- Neural network theory basics;
- Basics of neuromathematics;
- Professional tasks solutions based on Matlab and CUDA toolboxes;
- Fundamentals of Intelligent Cyber Security Management
- Intelligent technology for information security;
- Intelligent Learning Systems;
- Neuromathematics
- Image processing & Text processing;
- Computational intelligence;
- Neural Network Technology;
- Fuzzy Logic Technology
- Intelligent technology for information security;
- Neurocontrol;
- Neural Network Technology;
- Neurocomputers;
- Neurochips;
- Memristor based neural networks;
- Neuro-fuzzy technology in Intrusion Detection Systems on information resources;
- 3D images processing;
- Neural network based Intrusion detection system.

Specializations within this programme