

# Nanotechnology and materials for nano and microsystems

National University of Science and Technology MISIS

Degree or qualification is awarded: **Master of Science in the field Nanotechnologies and Microsystems Technology**

Language of study: **English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **273 000 rubles/year**

Programme webpage at the university website: <https://en.misis.ru/academics/masters-english/nanotechnology/>

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The program is focused on studies of micro- and nano-scale phenomena, materials and devices.

It gives students solid foundation in three core areas: nanomaterial fabrication and characterization; physical properties of micro and nanostructure; and devices. Novel materials and devices included in this program are based on the original research works of the present academic team. Among them are nanostructured carbon and metal polymer metamaterials, microsensors based on amorphous magnetic microwires, spintronics in nanogranular structures.

## Specializations within this programme

- Modeling and simulation of nanoscale materials and devices
- Electronic Properties of Quantum Confined Semiconductor Heterostructures
- Embedded systems and software engineering
- Physics and technology of magnetic nanostructures
- Physics and technology of micro and nano sensors
- Spintronics in diluted semiconductors and nanogranular structures
- Synthesis of nanomaterials and heterostructures
- Physics and technology of metal-carbon nanocomposites