

Quantum optics and Nanosciences

Novosibirsk State University

Degree or qualification is awarded: **Master of science in Physics**

Language of study: **English**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **5 200 USD per year**

Programme webpage at the university website:

<https://english.nsu.ru/admission/programs/master-s-degree-programs-english/quantum-optics-and-nanosciences/>

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Quantum optical technologies and nanoscience is an emerging field in modern physics and engineering. The master program "Quantum optics and nanoscience" provides opportunities to perform a research project with leading Russian research teams in experimental or theoretical physics, and to learn from the lectures given by recognized experts in the field. A publication in the peer-review international scientific journals is expected after the end of the project. We believe that this is a good starting point for research career in one of the most rapidly developing fields.

The students will acquire the following skills:

- planning projects in the field of quantum optical technologies and nanoscience;
- ability of development of theoretical models of dynamics of complex quantum systems;
- ability to perform experimental research with complex modern equipment;
- scientific communication in the field and presentation of results.

The students will learn the basics of modern quantum optics and quantum information, atomic spectroscopy, including laser cooling and trapping, fiber optics, silicon photonics and properties of low-dimensional systems.

Specializations within this programme